

magicolor[®] 330

Large-Capacity Input Feeder

Service Manual

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MINOLTA
QMS

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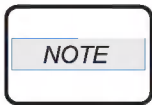
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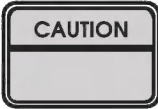
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1.1 Symbols Used in This Manual

Various symbols are used throughout this manual to either provide additional information on a specific topic or to warn of possible danger present during a procedure or action. Be aware of all symbols when they are used, and always read NOTE, CAUTION, and WARNING messages.



A Note may indicate an operating or maintenance procedure, practice, or condition that is necessary to accomplish a task efficiently. A Note may also provide additional information that is related to a specific subject, or the results achieved through a previous action.



A Caution indicates an operating or maintenance procedure, practice, or condition that, if not strictly observed, could result in damage to, or destruction of, equipment.



A Warning indicates an operating or maintenance procedure, practice, or condition that, if not strictly observed, could result in injury or loss of life.

1.2 Tray/Bin Naming Conventions

Within the video interface (Error Messages), service manual, student guide, and engine diagnostics two names will be presented for each tray. Please refer to the table below to avoid confusion in reference to these identifications.

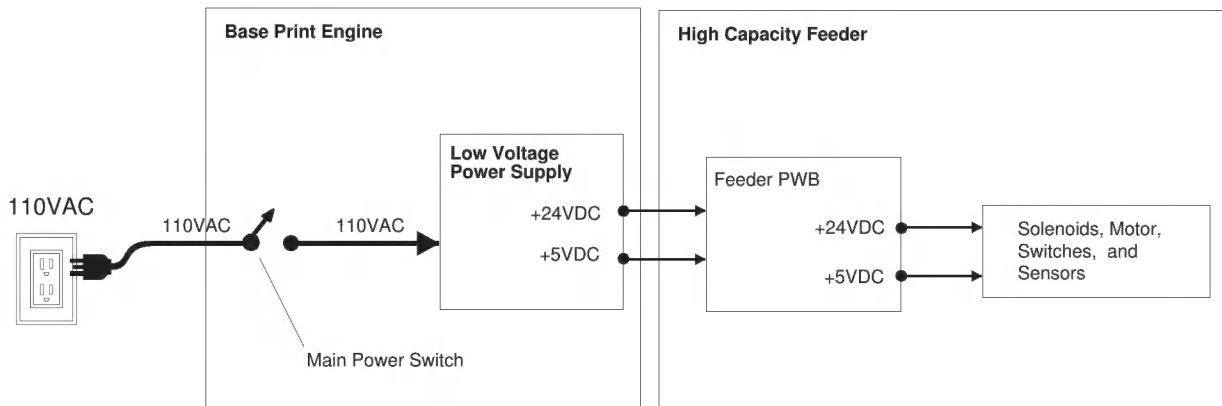
Video Interface (Error Messages)	Diagnostics and Manuals
MPT (Multipurpose Tray)	MSI (Multipurpose Sheet Inserter)
Upper Tray	Tray 1
OPT1 Bin	Tray 2
OPT2 Bin	Tray 3
OPT3 Bin	Tray 4

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2.1 LCIF Power

The base engine Low Voltage Power Supply provides the +5VDC and +24VDC that the Large Capacity Input Feeder requires for operation.

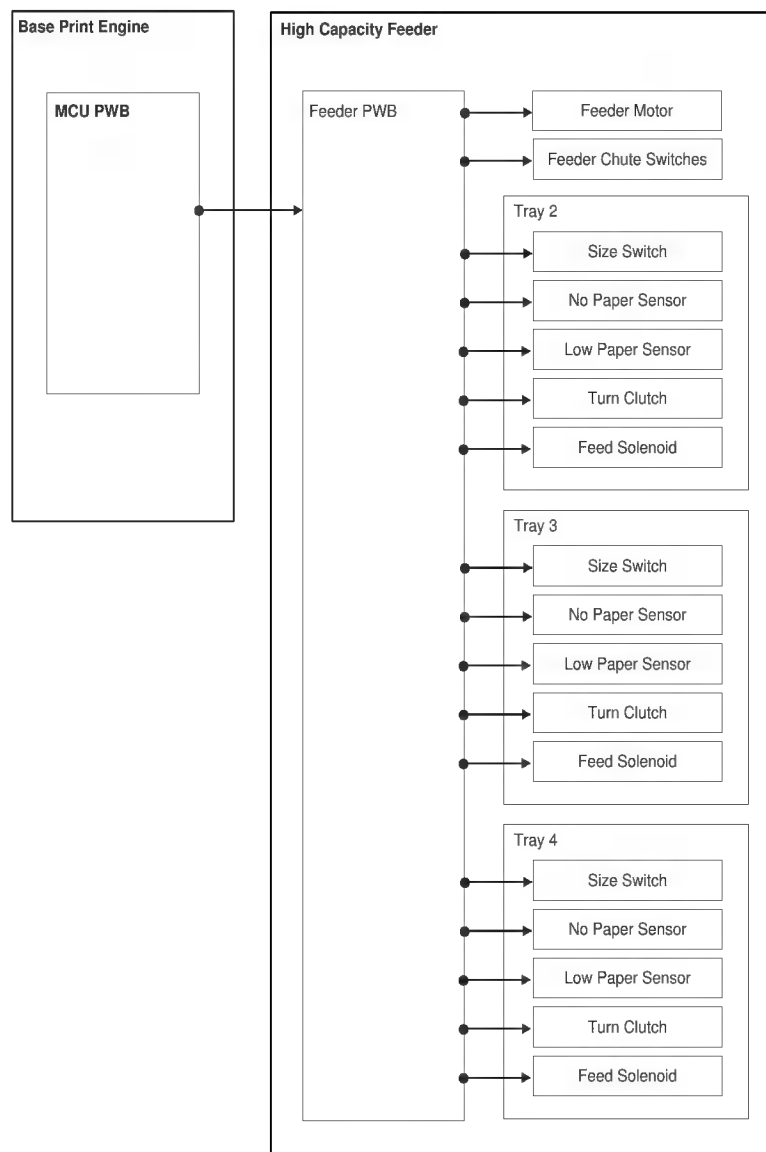
The printer AC power cord plugs into a grounded AC wall outlet. Switching on the Main Power Switch applies AC line voltage to the Low Voltage PowerSupply (LVPS). The LVPS converts the AC line voltage to regulated +5VDC and +24VDC voltages. The LVPS sends these voltages to the **LCIF Feeder PWB**. The Feeder PWB uses these voltages to run LCIF logic, sensors, solenoids, and the LCIF motor.



2.2 LCIF Control

LCIF Control is a broad term that is used to describe the LCIF resources that monitor and control the actions and operations of the LCIF.

The center of LCIF control is the Feeder PWB. The Feeder PWB, along with the MCU PWB, provide the logic and information processing that is necessary for the LCIF to function. Every electrical component within the LCIF is connected to the Feeder PWB. Sensors in the LCIF send paper feed status information to the Feeder PWB. The Feeder PWB processes that information and shares it with the MCU PWB. The MCU compares the information to timing tables stored in ROM. Acting on the results of the processing, the MCU PWB sends commands to the Feeder PWB, which in turn sends commands to the various LCIF components; switching on the Feeder Motor or switching off a solenoid.



2.2.1 LCIF Control Components

The LCIF Control is made up of several major components.

1. Feeder PWB

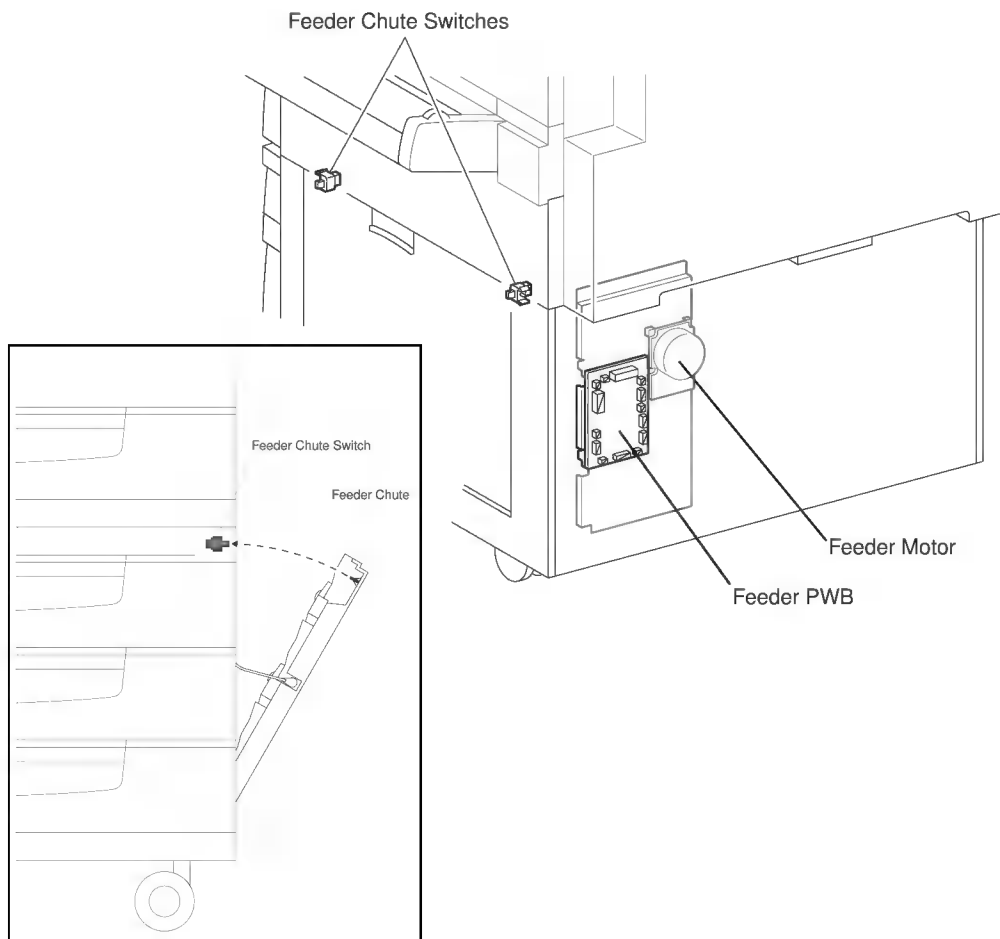
The Feeder PWB controls all LCIF functions, executes commands sent from the MCU PWB, and sends information back to the MCU PWB. All LCIF components are connected directly to the Feeder PWB.

2. Feeder Cover Switches

Two switches wired in series that monitor the Feeder Cover position.

3. Feeder Motor

Provides mechanical drive for the three LCIF Paper Feeders.



DS4700A

4. Size Switch Assemblies

Monitors the size of the paper loaded in the Tray and whether or not the Tray is installed in the LCIF. Each Tray has a Size Switch Assembly.

5. No Paper Sensors

Monitors the amount of paper in the Tray. Each Tray has a No Paper Sensor.

6. Low Paper Sensors

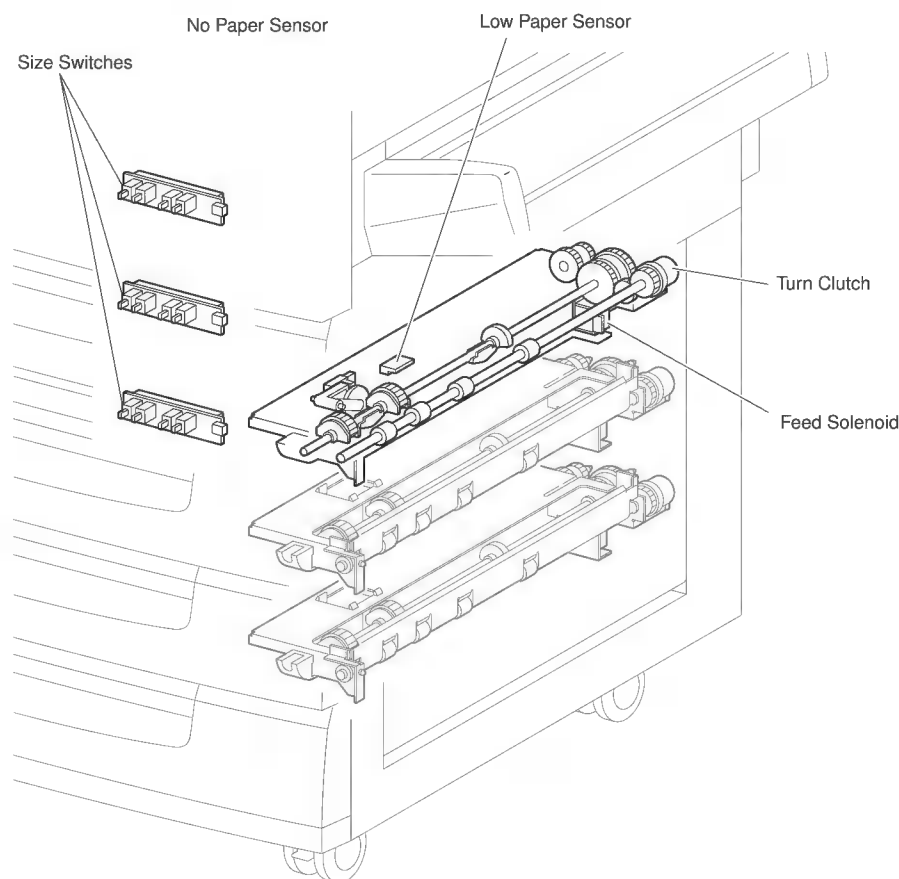
Monitors the amount of paper in the Tray. This is a magnetic sensor. As the paper stack in the Tray grows smaller, the metal Bottom Plate raises. At a specific point the Bottom Plate actuates the magnetic Low Paper Sensor. The MCU PWB interprets this signal as the paper level of the Tray is getting low. Each Tray has a Low Paper Sensor.

7. Feed Solenoids

Transmits Feed Motor drive to the Feed Rolls. Each Tray has a Feed Solenoid.

8. Turn Clutche

Transmits Feed Motor drive to the Turn Rolls. Each Tray has a Turn Clutch.



2.3 LCIF Error MessageTable

This table lists all of the LCIF Error Messages that the magicolor 330 MCU can generate.

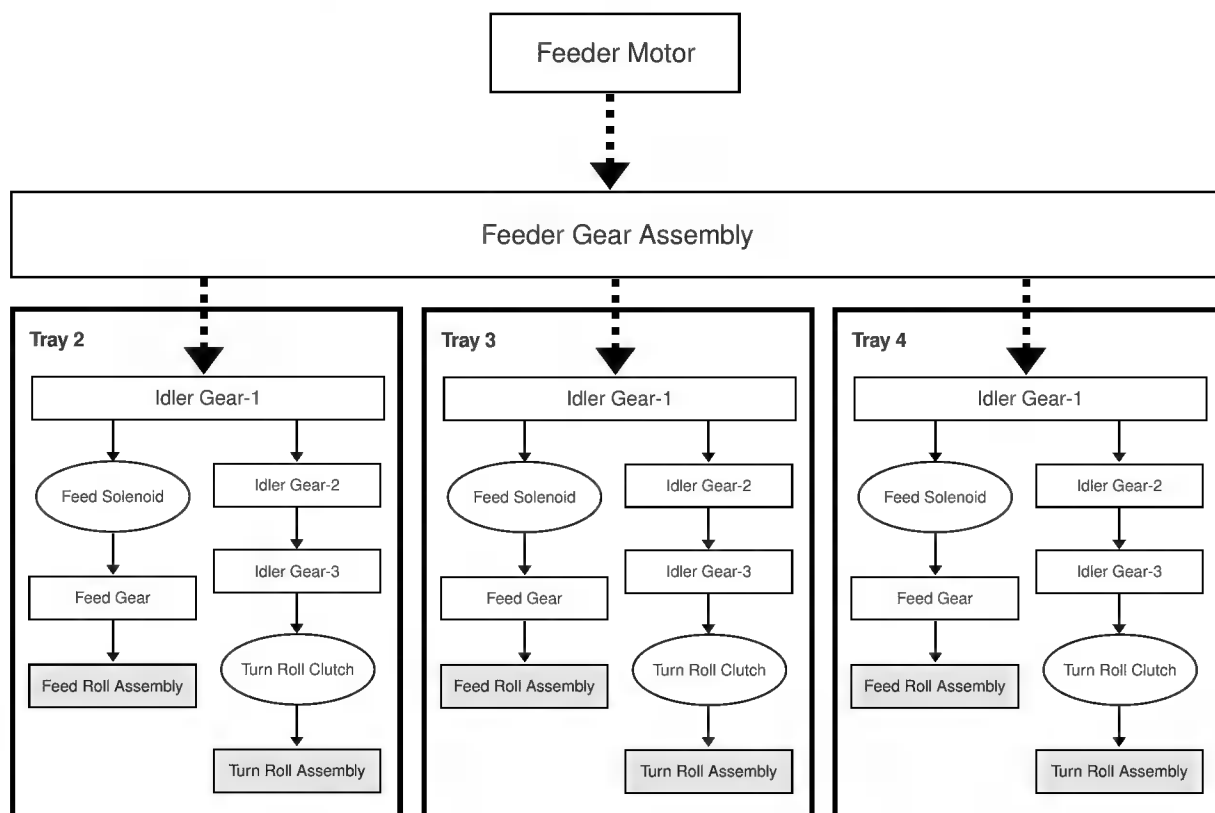
Displayed Error Message	Meaning of the Error Message	Detection Period	Printer response to the error ----- Procedure to clear the Error Message
Put <Size> Paper in OPT3 Bin	OPT2 Tray is out of paper. Logic control on the MCU PWB detected that the No Paper Sensor in Tray 3 is actuated.	When logic selects feeding from Tray 3	Stops after print cycle finishes. No new paper feeds ----- Load paper into OPT2 Tray
Put <Size> Paper in OPT2 Bin	OPT1 Tray is out of paper. Logic control on the MCU PWB detected that the No Paper Sensor in Tray 2 is actuated.	When logic selects feeding from Tray 2	Stops after print cycle finishes. No new paper feeds ----- Load paper into Tray 2
Put <Size> Paper in OPT1 Bin	Upper Tray is out of paper. Logic control on the MCU PWB detected that the No Paper Sensor in Tray 1 is actuated.	When logic selects feeding from Tray 1	Stops after print cycle finishes. No new paper feeds ----- Load paper Upper Tray
Adjust OPT3 Bin	There is a problem with OPT Bin. Logic control on the MCU PWB did not detect a Paper Tray installed in OPT3 bin.	When the printer selects a Feeder	Inhibits print cycle ----- Reseat the cassette into OPT3 Bin
Adjust OPT2 Bin	There is a problem with OPT Bin. Logic control on the MCU PWB did not detect a Paper Tray installed in OPT2 bin.	When the printer selects a Feeder	Inhibits print cycle ----- Reseat the cassette into OPT2 Bin
Adjust OPT1 Bin	There is a problem with OPT Bin. Logic control on the MCU PWB did not detect a Paper Tray installed in OPT1 bin.	When the printer selects a Feeder	Inhibits print cycle ----- Reseat the cassette into OPT1 Bin
Feeder Cover Missing	There is a problem with the Large Capacity Input Feeder Cover. Logic control on the MCU PWB detected that LCIF Cover Interlock Switch circuit is open.	Continuous	Stops immediately ----- Close the Feeder Cover

2.4 LCIFMechanical Drive

Mechanical Drive is a term that is used to describe both the rotation of the LCIF Feeder Motor and the action of the gears and clutches that are used to transmit and control motor drive to the components throughout the LCIF. The primary purpose of Mechanical Drive within the LCIF is to provide the mechanical energy needed to drive a sheet out of an LCIF paper tray and into the printer .

Drive for OPT1Tray, OPT2Tray, and OPT3Tray

The mechanical drive sequence is identical for all of the trays in the LCIF. The Feeder Motor generates the mechanical drive for the LCIF. The Feeder Gear Assembly transmits the Feeder Motor drive to Idler Gear-1 in each of the three Tray Drive Assemblies. Idler Gear-1 routes drive to the Feed Solenoid and to Idler Gear-2. The Feed Solenoid controls drive to the Feed Gear, which in turn transmits drive to the Feed Roll Assembly and to the Feed Rolls. Idler Gear-2 and Idler Gear-3 transmit drive to the Turn Roll Clutch. The Turn Roll Clutch controls drive to the Turn Roll Assembly and to the Turn Rolls.



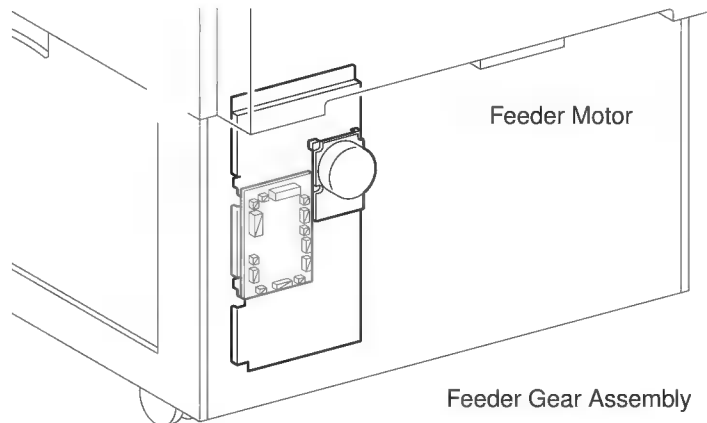
2.4.1 LCIF Drive Components

1. Feeder Motor

Provides mechanical drive for the three LCIF Paper Feeders.

2. Feeder Gear Assembly

Transmits Feeder Motor drive to the three Feeder Assemblies.



RS1789X

3. Feeder Drive Assembly

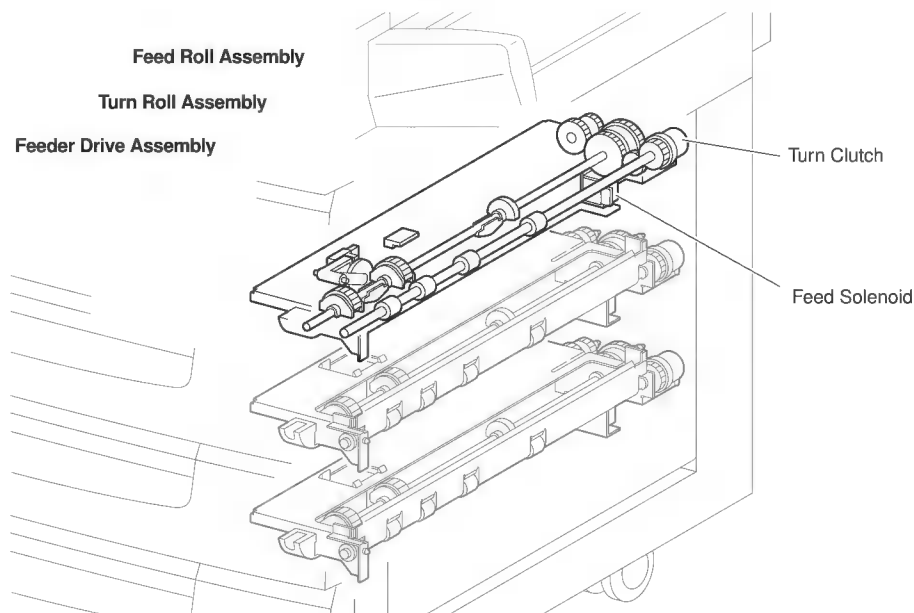
Controls and transmits drive to the Feed Rolls and to the Turn Rolls. The LCIF has three Feeder Drive Assemblies, one for each of the paper trays. Each Drive Assembly contains a number of components.

Feed Solenoid controls drive to the Feed Roll Assembly.

Feed Roll Assembly drives the Feed Rolls.

Turn Roll Clutch controls drive to the Turn Roll Assembly.

Turn Roll Assembly drives the Turn Rolls.

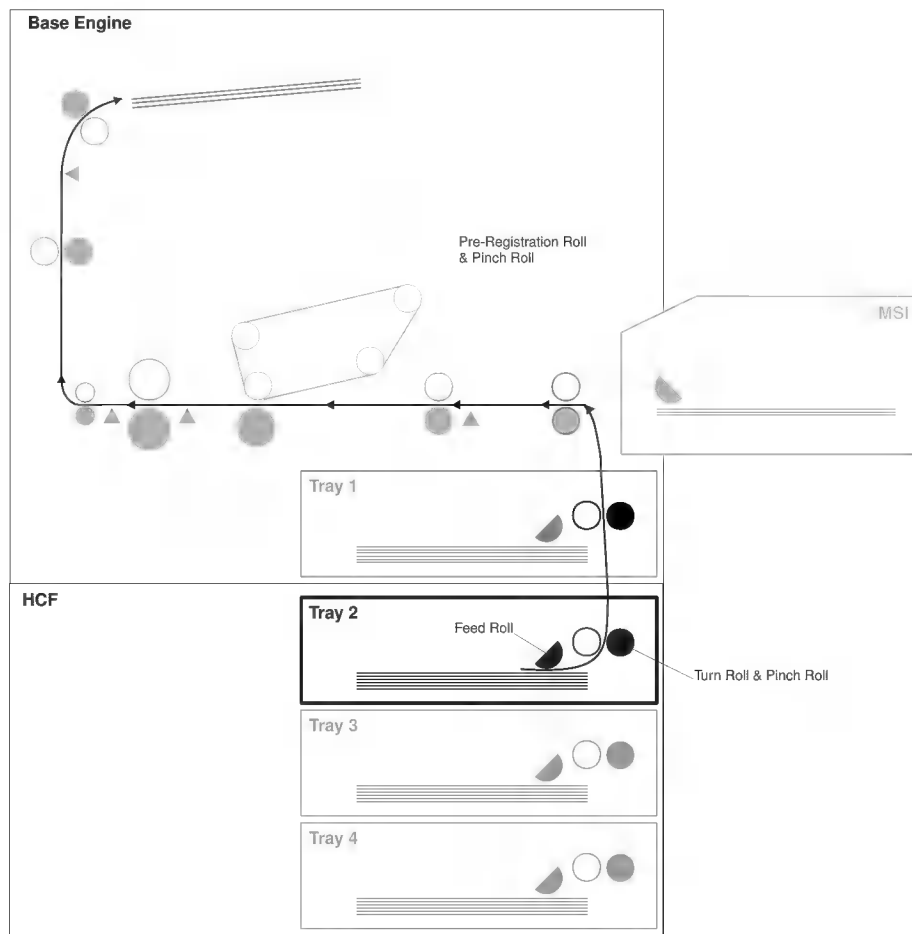


2.5 LCIF Paper Path

The LCIF Paper Path is the physical route that a sheet of paper takes from one of the LCIF paper trays and into the printer during a single print cycle. Rubber rollers drive the paper along the Paper Path.

2.5.1 Feed from OPT1 Tray

At the start of a print cycle the OPT1 Tray Feed Roll moves a single sheet of paper out of OPT1 Tray and into the OPT1 Tray Turn Roll. The OPT1 Tray Turn Roll drives the sheet of paper up into the Upper Tray Turn Roll. Upper Tray Turn Roll drives the sheet of paper into the Base Engine Pre-Registration Roll. The remaining paper path is identical to paper that is fed from either Upper Tray or from the MSI.

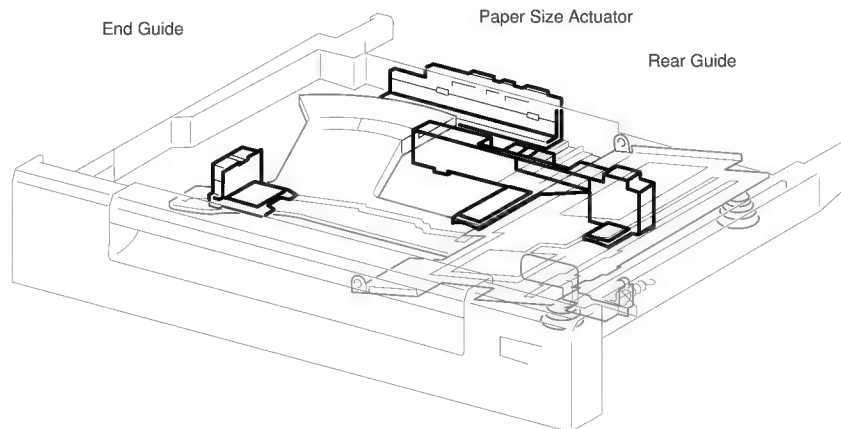


2.5.2 OPT1 Tray Paper Path Components

The LCIF OPT1 Tray Paper Path is made up of a number of transport rolls and paper sensors.

1. OPT1 Tray

Holds 250 sheets of plain paper of various sizes. Adjustable Side and End Guides transmit the size of the paper installed in the Tray to a Paper Size Actuator that is located at the rear of the Tray. When the Tray is installed into the Feeder, the Actuator presses against the Paper Size Sensor. The position of the Actuator presses a unique sequence of Paper Size Sensor switches. The sequence of actuated switches signals the MCU PWB that a specific paper size is installed in OPT1 Tray.



2. OPT1 bin

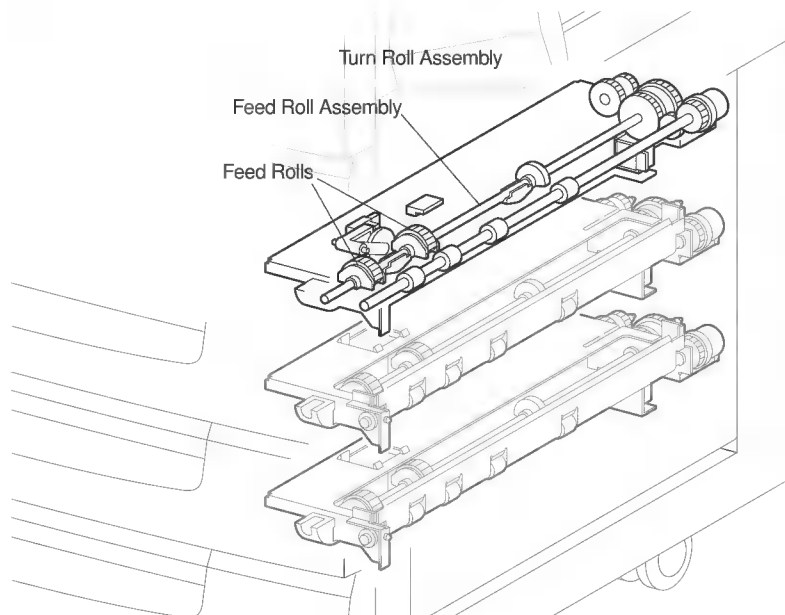
Framework that is installed at the top of the LCIF. OPT1 Tray slides into OPT1 bin. The Feeder includes a number of paper feed components.

Feed Solenoid transmits Feeder Motor drive to OPT1 Tray Feed Roll.

Feed Roll drives the top sheet of paper out of OPT1 Tray.

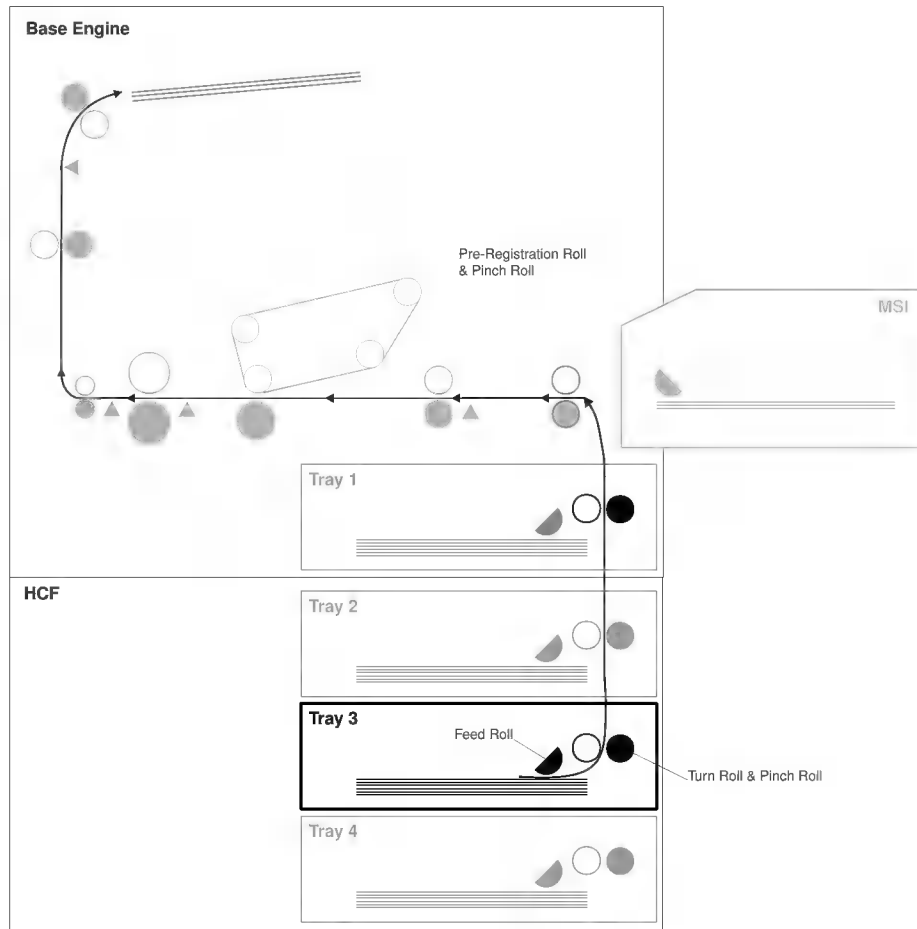
Turn Roll Clutch drives the Turn Roll.

Turn Roll drives the sheet of paper out of OPT1 Tray and into the Upper Tray Turn Roll.



2.5.3 Feed from OPT2 Tray

At the start of a print cycle the OPT2 Tray Feed Roll moves a single sheet of paper out of OPT2 Tray and into the OPT2 Tray Turn Roll. The OPT2 Tray Turn Roll drives the sheet of paper up into the OPT1 Tray Turn Roll. The OPT1 Tray Turn Roll drives the sheet of paper up into the Upper Tray Turn Roll. The Upper Tray Turn Roll drives the sheet of paper into the Base Engine Pre-Registration Roll. The remaining paper path is identical to paper that is fed from either Upper Tray or from the MSI.

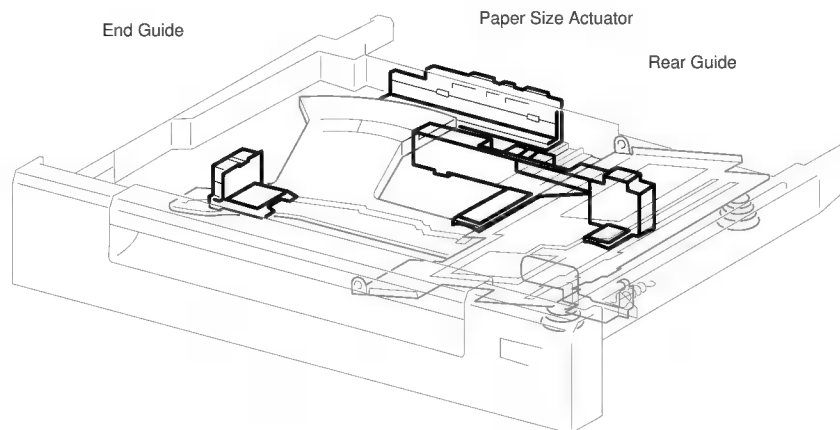


2.5.4 OPT2 Tray Paper Path Components

The LCIF OPT2 Tray Paper Path is made up of a number of transport rolls and paper sensors.

1. OPT2 Tray

Holds 250 sheets of plain paper of various sizes. Adjustable Side and End Guides transmit the size of the paper installed in the Tray to a Paper Size Actuator that is located at the rear of the Tray. When the Tray is installed into the Feeder, the Actuator presses against the Paper Size Sensor. The position of the Actuator presses a unique sequence of Paper Size Sensor switches. The sequence of actuated switches signals the MCU PWB that a specific paper size is installed in OPT2 Tray.



2. OPT2 bin

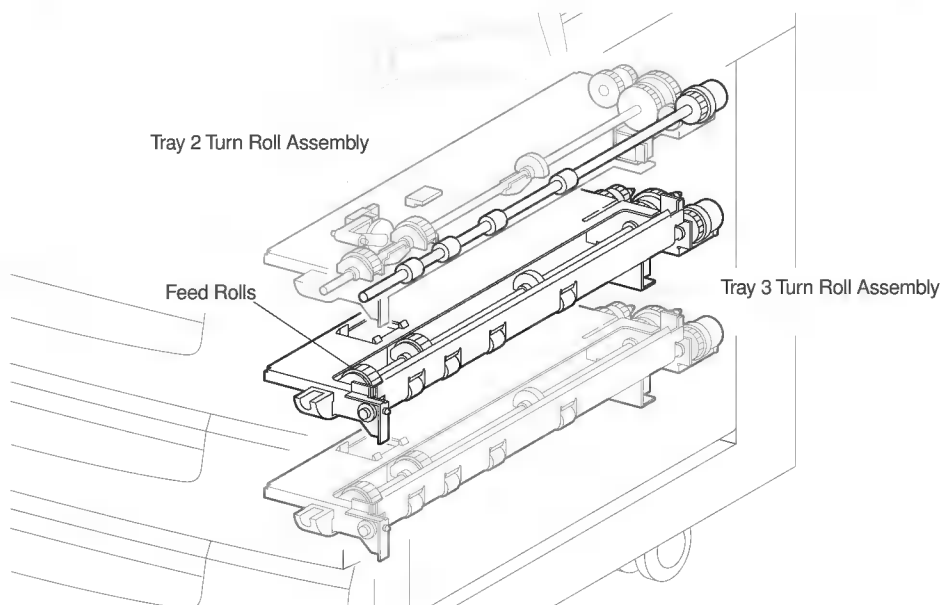
Framework that is installed in the middle of the LCIF. OPT2 Tray slides into OPT2 bin. The Feeder includes a number of paper feed components.

Feed Solenoid transmits Feeder Motor drive to OPT2 Tray Feed Roll.

Feed Roll drives the top sheet of paper out of OPT2 Tray.

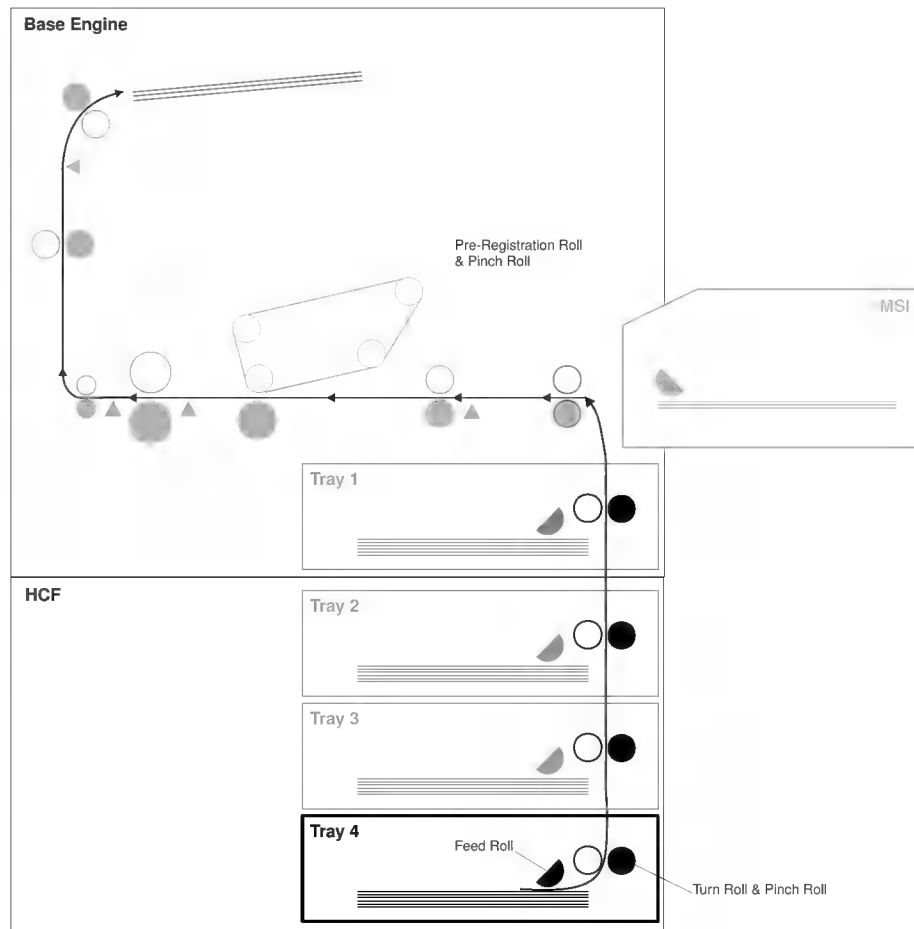
Turn Roll Clutch drives the Turn Roll.

Turn Roll drives the sheet of paper out of OPT2 Tray and into the OPT1 Tray Turn Roll.



2.5.5 Feed from OPT3 Tray

At the start of a print cycle the OPT3 Tray Feed Roll moves a single sheet of paper out of OPT3 Tray and into the OPT3 Tray Turn Roll. The OPT3 Tray Turn Roll drives the sheet of paper up into the OPT2 Tray Turn Roll. OPT2 Tray Turn Roll drives the sheet of paper up into the OPT1 Tray Turn Roll. OPT1 Tray Turn Roll drives the sheet of paper up into the Upper Tray Turn Roll. Upper Tray Turn Roll drives the sheet of paper into the Base Engine Pre-Registration Roll. The remaining paper path is identical to paper that is fed from either Upper Tray or from the MSI.

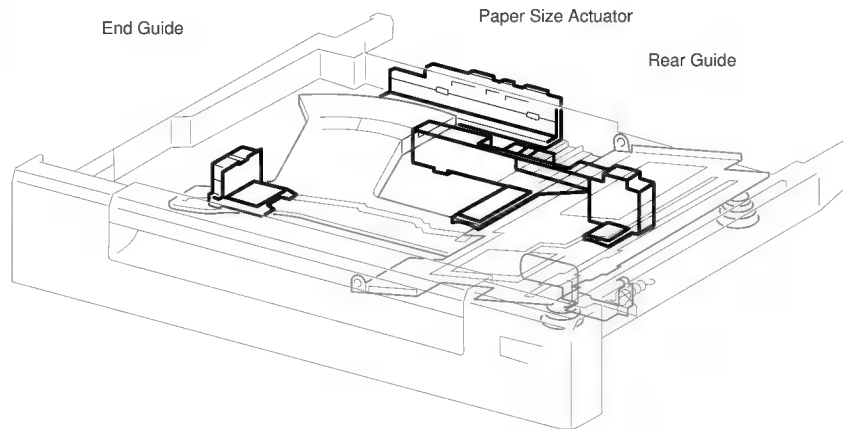


2.5.6 OPT3 Tray Paper Path Components

The LCIF OPT3 Tray Paper Path is made up of a number of transport rolls and paper sensors.

1. OPT3 Tray

Holds 250 sheets of plain paper of various sizes. Adjustable Side and End Guides transmit the size of the paper installed in the Tray to a Paper Size Actuator that is located at the rear of the Tray. When the Tray is installed into the Feeder, the Actuator presses against the Paper Size Sensor. The position of the Actuator presses a unique sequence of Paper Size Sensor switches. The sequence of actuated switches signals the MCU PWB that a specific paper size is installed in OPT3 Tray.



2. OPT3 bin

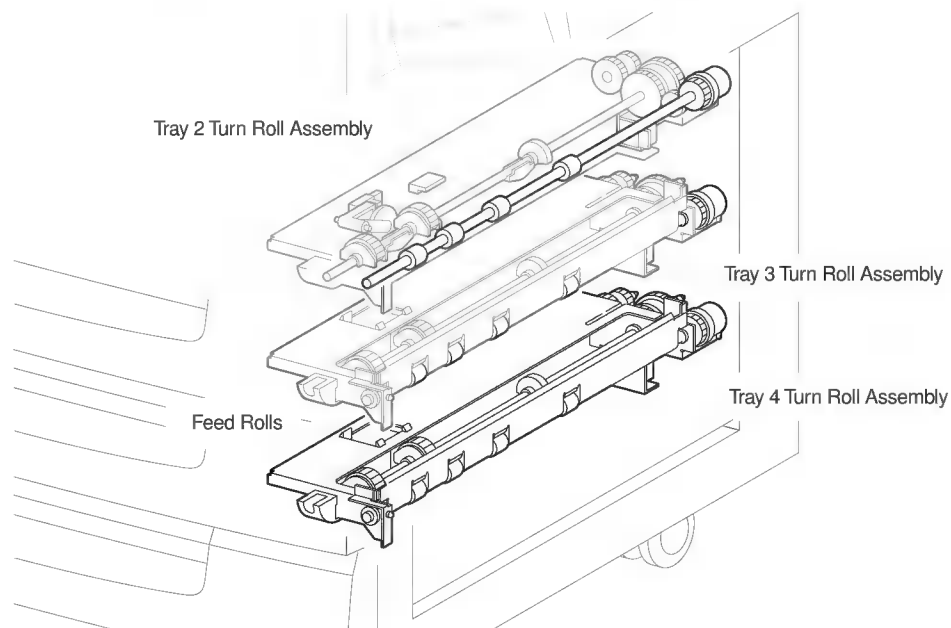
Framework that is installed at the bottom of the LCIF. OPT3 Tray slides into OPT3 bin. The Feeder includes a number of paper feed components.

Feed Solenoid transmits Feeder Motor drive to OPT3 Tray Feed Roll.

Feed Roll drives the top sheet of paper out of OPT3 Tray.

Turn Roll Clutch drives the Turn Roll.

Turn Roll drives the sheet of paper out of OPT3 Tray and into OPT2 Tray Turn Roll.



3.1 How to Use the FIP Flowchart.	LCIF-8
3.2 How to Follow a FIP.	LCIF-22
3.3 FIP Flowchart	LCIF-23

3.1 How to Use the FIP Flowchart

If you used the Service Flowchart, it should have directed you to this section. Follow the **FIP Flowchart** located at the end of this section to analyze your Large Capacity Input Feeder problem.

1. If the printer exhibits an error message, use the FIP Flowchart to locate the correct FIP to resolve the problem.
2. If you have an LCIF operation problem; go to the **LCIF PERFORMANCE** box.
3. Follow the arrow leading from your problem box to the individual Primary FIP (Fault Isolation Procedure) that corresponds to your error message or LCIF operation problem.
4. Follow the instructions presented in the FIP.
5. If a FIP instructs you to perform a diagnostic test, refer to *Section 8 Running Printer Diagnostics*.
6. Voltage and resistance values presented in the FIPs are an approximation. Actual readings may vary from the stated values.
7. Primary FIPs may direct you to a Secondary FIP.

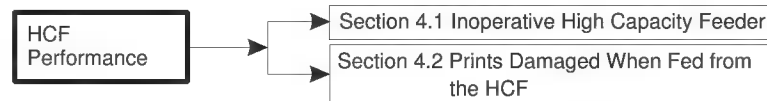
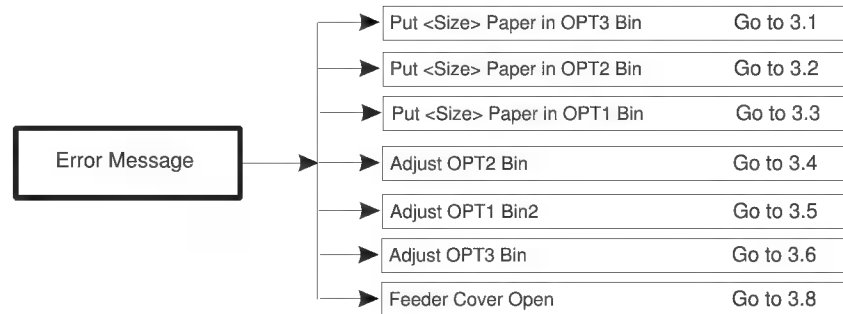
3.2 How to Follow a FIP

1. Each numbered step in a FIP instructs you to perform a certain action or procedure.
2. The action box may contain additional information and numbered substeps you must follow to perform the action.
3. The action is followed by a question.
4. If your response to the question is **Yes**, then follow the instructions for a Yes reply.
5. If your response to the question is **No**, then follow the instructions for a No reply.
6. FIPs may ask you to take voltage readings at certain test points within the LCIF or within the printer.
Sections 7 and 10 contain information on test point locations and signal names.
7. FIPs often ask you to replace a LCIF component. Section 7, "Disassembly and Reassembly Procedures," provides you detailed steps for removing and replacing all major parts of the LCIF.

2	NO PAPER SENSOR TEST 1. Enter Diagnostics and test Tray 1 No Paper Sensor. 2. Slide Tray 1 out of the printer. 3. Manually actuate and deactivate Tray 1 No Paper Sensor. Does the Diagnostics Status Window display "actuated" when you manually actuate the sensor?	Go to step 3	Replace the No Paper Sensor Assembly (DRP 6.78)
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- Step number
- Action with substeps, additional information, and a question.
- Action to take if the answer to the question is YES
- Action to take if the answer to the question is N

3.3 FIP Flowchart



4.1 Error Message: Put <Size> Paper in OPT3 Bin.....	LCIF-27
4.2 Error Message: Put <Size> Paper in OPT2 Bin.....	LCIF-28
4.3 Error Message: Put <Size> Paper in OPT1 Bin.....	LCIF-29
4.4 Error Message: Adjust OPT2 Bin	LCIF-30
4.5 Error Message: Adjust OPT1 Bin	LCIF-31
4.6 Error Message: Adjust OPT3 Bin	LCIF-32
4.7 Error Message: Feeder Cover Missing	LCIF-33

4.1 Error Message: Put <Size> Paper in OPT3 Bin

OPT3 bin tray is out of paper.

Logic control on the MCU PWB detected that the No Paper Sensor in OPT3 Bin is actuated. The Engine Diagnostic Menu may refer to the the OPT3 Bin no paper sensor as Tray 4 no paper sensor.

Step	Actions and Question	Yes	No
	SUSPECT COMPONENTS The following components are associated with this specific problem. One or more of these components may have failed partially or completely. If you cannot isolate the problem using this FIP, replace each component listed below, one at a time, until the problem disappears. • Wiring and connectors linking the LCIF with the MCU PWB		
1	LCIF TRAY INSPECTION Slide OPT3 tray out of the LCIF. Is the Tray out of paper?	Load paper into the Tray.	Go to step 2
2	NO PAPER SENSOR TEST 1. Enter Diagnostics and test OPT3/Tray 4 No Paper Sensor. 2. Manually actuate and deactivate the No Paper Sensor. Is "actuated" displayed when you manually actuate the sensor? And, is "not actuated" displayed when you manually deactivate the sensor?	Go to step 3	Replac OPT3/Tray 4 No Paper Sensor Assembly (LCIF DRP 6.23)
3	Replace the Feeder PWB (LCIF DRP 6.10) Does the error message still appear?	Go to step 4	Problem Solved
4	Replace the MCU PWB (Base Engine DRP 6.123) Does the error message still appear?	Go to suspect components	Problem Solved

4.2 Error Message: Put <Size> Paper in OPT2 Bin

OPT2 Bin (tray) is out of paper.

Logic control on the MCU PWB detected that the No Paper Sensor in OPT2 Tray is actuated. The Engine Diagnostic Menu may refer to the the OPT2 Bin no paper sensor as Tray 3 no paper sensor.

Step	Actions and Question	Yes	No
	SUSPECT COMPONENTS The following components are associated with this specific problem. One or more of these components may have failed partially or completely. If you cannot isolate the problem using this FIP, replace each component listed below, one at a time, until the problem disappears. • Wiring and connectors linking the LCIF with the MCU PWB		
1	LCIF TRAY INSPECTION Slide OPT2 tray out of the LCIF. Is the Tray out of paper?	Load paper into the Tray.	Go to step 2
2	NO PAPER SENSOR TEST 1. Enter Diagnostics and test OPT2/Tray 3 No Paper Sensor. 2. Manually actuate and deactuate the No Paper Sensor. Is "actuated" displayed when you manually actuate the sensor? And, is "not actuated" displayed when you manually deactuate the sensor?	Go to step 3	Replac OPT2/Tray 3 No Paper Sensor Assembly (LCIF DRP 6.23)
3	Replace the Feeder PWB (LCIF DRP 6.10) Does the error message still appear?	Go to step 4	Problem Solved
4	Replace the MCU PWB (Base Engine DRP 6.123) Does the error message still appear?	Go to suspect components	Problem Solved

4.3 Error Message: Put <Size> Paper in OPT1 Bin

OPT1 Bin (tray) is out of paper.

Logic control on the MCU PWB detected that the No Paper Sensor in Tray 2 is actuated. The Engine Diagnostic Menu may refer to the the OPT1 Bin no paper sensor as Tray 2 no paper sensor.

Step	Actions and Question	Yes	No
	SUSPECT COMPONENTS The following components are associated with this specific problem. One or more of these components may have failed partially or completely. If you cannot isolate the problem using this FIP, replace each component listed below, one at a time, until the problem disappears. • Wiring and connectors linking the LCIF with the MCU PWB		
1	LCIF TRAY INSPECTION Slide OPT1 tray out of the LCIF. Is the Tray out of paper?	Load paper into the Tray.	Go to step 2
2	NO PAPER SENSOR TEST 1. Enter Diagnostics and test OPT1/Tray 2 No Paper Sensor. 2. Manually actuate and deactivate the No Paper Sensor. Is "actuated" displayed when you manually actuate the sensor? And, is "not actuated" displayed when you manually deactivate the sensor?	Go to step 3	Replac OPT1/Tray 2 No Paper Sensor Assembly (LCIF DRP 6.23)
3	Replace the Feeder PWB (LCIF DRP 6.10) Does the error message still appear?	Go to step 4	Problem Solved
4	Replace the MCU PWB (Base Engine DRP 6.123) Does the error message still appear?	Go to suspect components	Problem Solved

4.4 Error Message: Adjust OPT2 Bin

There is a problem with OPT2 Bin.

Logic control on the MCU PWB did not detect a Paper Tray installed in OPT2 Bin.

Step	Actions and Question	Yes	No
	SUSPECT COMPONENTS The following components are associated with this specific problem. One or more of these components may have failed partially or completely. If you cannot isolate the problem using this FIP, replace each component listed below, one at a time, until the problem disappears. • Wiring and connectors linking the LCIF to the Base Engine • Wiring and connectors linking the components		
1	PAPER TRAY INSPECTION 1. Remove the Paper Tray from OPT2 bin. 2. Inspect the Size Actuators at the rear of the Tray. Are the Actuators intact and free of damage?	Go to step 2	Replace the Paper Tray.
2	Replace the OPT2 bin Size Switch Assembly (LCIF DRP 6.13) Does the error message still appear?	Go to step 3	Problem solved
3	Replace the Feeder PWB (LCIF DRP 6.10) Does the error message still appear?	Go to step 4	Problem solved
4	Replace the MCU PWB (Base Engine DRP 6.123) Does the error message still appear?	Go to suspect components	Problem solved

4.5 Error Message: Adjust OPT1 Bin

There is a problem with OPT1 Bin.

Logic control on the MCU PWB did not detect a Paper Tray installed in OPT1 Bin.

Step	Actions and Question	Yes	No
	SUSPECT COMPONENTS The following components are associated with this specific problem. One or more of these components may have failed partially or completely. If you cannot isolate the problem using this FIP, replace each component listed below, one at a time, until the problem disappears. • Wiring and connectors linking the LCIF to the Base Engine • Wiring and connectors linking the components		
1	PAPER TRAY INSPECTION 1. Remove the Paper Tray from OPT1 bin. 2. Inspect the Size Actuators at the rear of the Tray. Are the Actuators intact and free of damage?	Go to step 2	Replace the Paper Tray.
2	Replace the OPT2 bin Size Switch Assembly (LCIF DRP 6.13) Does the error message still appear?	Go to step 3	Problem solved
3	Replace the Feeder PWB (LCIF DRP 6.10) Does the error message still appear?	Go to step 4	Problem solved
4	Replace the MCU PWB (Base Engine DRP 6.123) Does the error message still appear?	Go to suspect components	Problem solved

4.6 Error Message: Adjust OPT3 Bin

There is a problem with OPT3 bin.

Logic control on the MCU PWB did not detect a Paper Tray installed in OPT3 bin.

Step	Actions and Question	Yes	No
	SUSPECT COMPONENTS The following components are associated with this specific problem. One or more of these components may have failed partially or completely. If you cannot isolate the problem using this FIP, replace each component listed below, one at a time, until the problem disappears. • Wiring and connectors linking the LCIF to the Base Engine • Wiring and connectors linking the components		
1	PAPER TRAY INSPECTION 1. Remove the Paper Tray from OPT3 bin. 2. Inspect the Size Actuators at the rear of the Tray. Are the Actuators intact and free of damage?	Go to step 2	Replace the Paper Tray.
2	Replace the OPT2 bin Size Switch Assembly (LCIF DRP 6.23) Does the error message still appear?	Go to step 3	Problem solved
3	Replace the Feeder PWB (LCIF DRP 6.10) Does the error message still appear?	Go to step 4	Problem solved
4	Replace the MCU PWB (Base Engine DRP 6.123) Does the error message still appear?	Go to suspect components	Problem solved

4.7 Error Message: Feeder Cover Missing

There is a problem with the Large Capacity Input Feeder Cover.

Logic control on the MCU PWB detected that LCIF Cover Interlock Switch circuit is open.

Step	Actions and Question	Yes	No
	SUSPECT COMPONENTS The following components are associated with this specific problem. One or more of these components may have failed partially or completely. If you cannot isolate the problem using this FIP, replace each component listed below, one at a time, until the problem disappears. • Wiring and connectors linking the components		
1	LCIF FEEDER COVER RESEAT 1. Open the Feeder Cover. 2. Firmly close the Feeder Cover. Does the error message still appear?	Go to step 2	Problem solved
2	LCIF FEEDER COVER SWITCH INSPECTION 1. Open the Feeder Cover. 2. Inspect the Feeder Cover Switch actuators that are located near the top-rear and top-front of the Cover. Are the actuators intact and free of damage?	Go to step 3	Replace the LCIF Cover Assembly (LCIF DRP 6.8)
3	LCIF FEEDER COVER SWITCH TEST 1. Enter Diagnostics and run the LCIF Cover Interlock Switch input test. 2. Close the Feeder Cover. 3. Observe the last number in the Diagnostic Status Window. 4. Open the Feeder Cover. Does the last number in the Diagnostic Status Window change from 00 to 01, when you open the LCIF Feeder Cover?	Go to step 5	Go to step 4
4	Replace both Feeder Cover Switches (LCIF DRP 6.14) Does the error message still appear?	Go to step 5	Problem Solved
5	Replace the Feeder PWB (LCIF DRP 6.10) Does the error message still appear?	Replace the MCU PWB (Base Engine DRP 6.123)	Problem Solved

5.1 Error Message: Inoperative LCIF	LCIF-37
5.2 Printer Error: Prints Damaged When Fed From the LCIF	LCIF-39

5.1 Error Message: Inoperative LCIF

The LCIF does not work at all, the LCIF does not attempt to feed paper, and the problem is not identified by a displayed Error Message.

Step	Actions and Questions	Yes	No
	SUSPECT COMPONENTS The following components are associated with this specific problem. One or more of these components may have failed partially or completely. If you cannot isolate the problem using this FIP, replace each component listed below, one at a time, until the problem disappears. • Wiring and connectors linking the components		
1	LCIF HARNESS CHECK Check the wire harness that is running between the Feeder PWB and the MCU PWB. Is one end of the wire harness connected to P/J133 on the Feeder PWB and is the other end connected to the MC PWB and the LVPS?	Go to step 2	Reconnect the wire harness
2	PRINTER OPERATION CHECK Generate a printer test print fed from Upper Tray. Does the printer generate a test print fed from UpperTray?	Go to step 3	Go to FIP 4.1 Inoperative Printer in the Base Engine Manual
3	LCIF OPERATION CHECK Generate test prints from Tray 2, OPT2Tray, and OPT3 Tray. Does the printer generate a test print from any of the LCIF trays?	Go to step 7	Go to step 4
4	LCIF +5VDC VOLTAGE CHECK 1. Remove the LCIF Rear Cover (LCIF DRP 6.2). 2. Measure the voltage between P/J133-B5 and FG (frame ground) on the Feeder PWB. Is there +5VDC between P/J133-B5 and FG on the Feeder PWB?	Go to step 5	Go to the Base Engine Manual and troubleshoot for a loss of +5VDC from LVPS
5	LCIF +24VDC VOLTAGE CHECK Measure the voltage between P/J133-B1 and FG (frame ground) and between P/J133-B2 and FG on the Feeder PWB. Is there +24VDC between P/J133-B1 and FG and between P/J133-B2 and FG?	Go to step 6	Go to the Base Engine Manual and troubleshoot for a loss of +24VDC from the MCU PWB

Step	Actions and Questions	Yes	No
6	Replace the Feeder PWB (LCIF DRP 6.10). Is the LCIF now operational?	Problem solved	Replace the MCU PWB (Base Engine DRP 6.123)
7	APPLICATION SOFTWARE 1. If possible, run a OPT1 Tray, OPT2 Tray, and OPT3 Tray print job from a different application. Does the printer process the print request?	Reload the problem application software	Go to step 8
8	DRIVER SOFTWARE RELOAD 1. Reload the printer driver software. 2. Run a OPT2Tray, OPT3Tray, and Tray 5 print job from the host computer. Does the printer process the print request?	Problem solved	Go to suspect components

5.2 Printer Error: Prints Damaged When Fed From the LCIF

Paper Fed from the LCIF exits the printer either wrinkled, creased, or torn. The printer neither jams nor displays an error message.

Step	Actions and Questions	Yes	No
	SUSPECT COMPONENTS The following components are associated with this specific problem. One or more of these components may have failed partially or completely. If you cannot isolate the problem using this FIP, replace each component listed below, one at a time, until the problem disappears. • Wiring and connectors linking the components		
1	FEEDER ISOLATIO Feed paper out of OPT1 Tray, then OPT2 Tray, and then OPT3 Tray. Is the paper damaged when fed out of OPT1 Tray?	Go to step 4	Go to step 2
2	Is the paper damaged when fed out of OPT2 Tray?	Go to step 4	Go to step 3
3	Is the paper damaged when fed out of OPT3 Tray?	Go to step 4	
4	PAPER INSPECTION Inspect the paper that is loaded in the suspect tray. Is the paper in good condition and undamaged?	Go to step 5	Replace the paper with new, undamaged paper
5	PAPER TRAY INSPECTION Remove and inspect the suspect paper tray. Is the paper tray in good condition and undamaged?	Go to step 6	Replace the paper tray with a new one
6	FEEDER INSPECTION Feed a sheet of paper out of the suspect paper tray and open the LCIF Cover Assembly just after the leading edge of the paper exits the tray's Drive Assembly. Is the sheet of paper damaged as it exits the Drive Assembly?	Go to step 7	Go to step 8
7	1. Replace the Feed Rolls in the suspect Feeder LCIF DRP 6.18). 2. Feed a sheet of paper out of the suspect paper tray and open the LCIF Cover Assembly just after the leading edge of the paper exits the tray's Drive Assembly. Is the sheet of paper damaged as it exits the Drive Assembly?	Replace the LCIF Drive Assembly (LCIF DRP 6.15)	Problem solved

Step	Actions and Questions	Yes	No
8	COVER ASSEMBLY INSPECTION Open the LCIF Cover Assembly and inspect it and the attached Pinch Rolls for damage. Is the Cover Assembly in good condition and undamaged?	Go to step 9	Replace the LCIF Cover Assembly (LCIF DRP 6.8)
9	TURN IN COVER INSPECTION With the LCIF Cover Assembly open, inspect the three Turn In Covers for damage. Are the three Turn IN Covers in good condition and undamaged?	Go to step 10	Replace the damaged LCIF Turn IN Cover (LCIF DRP 6.9)
10	TURN ROLL TEST 1. Enter Diagnostics and run the LCIF Feeder Motor. 2. While the LCIF Feeder Motor is running run the Diagnostic tests that switch on the OPT1 Tray, OPT2 Tray, and Tray 4 Turn Roll Solenoids. 3. With the LCIF Cover Assembly open, inspect the three sets of Turn Rolls Do all three sets of Turn Rolls rotate?	Inspect the Turn Roll area of Upper Tray for damage or obstructions that could cause damage to paper fed from the LCIF	Replace the Turn Clutch for the Turn Rolls that do not rotate (LCIF DRP 6.16)

Section 6—Engine Diagnostics

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6.2 Using Diagnostics Test Prints	LCIF-45

6.1 Running Engine Diagnostics

Refer to Section 7 of the *magicolor 330 Service Manual* for detailed instructions on how to use magicolor 330 Diagnostics. This section of the *magicolor 330 Large-Capacity Input Feeder Service Manual* shows you how to access and read the LCIF diagnostic areas of magicolor 330 Engine Diagnostics. The two Diagnostic areas relating to the LCIF are:

1. Printing / Status Control
2. Diagnostics Control

The performance of Fault Isolation within the Engine Diagnostics can be found in Section 3 of this manual.

6.1 Required Equipment

The following equipment is required to connect to the Engine Diagnostics:

1. Portable Computer
2. Debug Cable (available from QMS, Inc.)
3. RS232 PC Cable (local purchase)
4. Terminal Program (i.e., HyperTerminal, VTERM, etc.)
5. #2 Phillips Head Screwdriver

6.1.2 Portable Computer to Printer Setup Procedure

1. Remove Printer MCU PWB Cover, right side of Printer (might require the use of #2 Phillips head screwdriver)
2. Connect Serial Cable to Portable Computer's Serial Port (refer to computer's user guide)
3. Connect Debug Cable to Serial Cable
4. Connect Debug Cable to Debug Port on MCU PWB

6.1.3 Terminal Program Setup

6.1.3.1 HyperTerminal (Windows 95 O/S)

1. Bootup Portable Computer to Windows 95, once booted up and running, start the HyperTerminal program
2. Create a "New Connection"
 - a. Type in Name and choose Icon
 - b. Select the Com Port that your serial port is connected to, either "Direct to Com 1", "Direct to Com 2", "Direct to Com 3", or "Direct to Com 4".
 - c. Make the following selections for the Com Properties:
 - Bits per second; select "9600"
 - Data bits; select "8"
 - Parity; select "None"
 - Stop bits; select "1"
 - Flow Control; select "Xon/Xoff"
 - Select "OK" button

Once the new connection setup procedure is completed, HyperTerminal will automatically connect to the serial cable through the Com port you selected. You are now ready to run the Engine Diagnostics.

6.1.3.2 VTERM (DOS O/S)

1. Bootup Portable Computer to DOS
2. At the C:\ prompt, type "VTERM"
3. Once VTERM has started, enter the setup menu, select "F5"
4. Make the following the selections in the setup menus:
 - Terminal type; select "VT100 (ANSI)"
 - Communications rate; select "9600"
 - Data bits/parity; select "8 NONE"
 - Stop bits; select "ONE"
 - Auto Xon/Xoff; select "ON"
5. The setup procedure is now completed, select "Esc" to end setup.
6. Power "ON" the printer (wait for the printer to finish it's power up sequence before proceeding)
 - VTERM will automatically connect to the serial cable through the Com port.
7. Press the "Ctrl" & "D" keys simultaneously to reach the "<DBG> prompt"
8. Type "edg" for the Main Menu to appear

You are now ready to run the Engine Diagnostics.

9.  If a test result becomes suspect during the Engine Diagnostic testing, the printer should be turned "OFF" and then steps 5 through 7 should be repeated. After the printer has powered back up, repeat the suspect test to confirm the results of the initial test.

6.2 Using Diagnostics Test Prints

Image Quality FIPs may ask you to generate a Test Print to help isolate the cause of an image quality problem. Follow the instructions in each FIP to evaluate the Test Print.

If the printer can generate a normal Test Print on request, then the Controller PWB, the host software, or the interface cable between the printer and the host computer is most likely the cause of the image quality problem.

6.2.1 To Generate a Test Print

1. Remove Right Cover Assembly (RRP 9.8).
2. Remove the Controller PWB (RRP 9.129) so you can access the MCU PWB.
3. Remove the access panel beneath the Controller PWB.
4. At the PJ3 location you will find a switch. Move the PJ3 switch to the on position.
5. Switch on printer main power.
6. The printer generates process black (all four colors layered) grid patterns.
7. The printer feeds from the first tray that has paper - in this order, UpperTray, OPT1Tray, OPT2 Tray, OPT3 Tray, and MSI. The printer sends the test prints to the Face Down Output Tray.
8. The printer generates test prints until you stop the test. To stop generating test prints, move the switch to the "1" position.



Image Quality FIPs often ask you to stop the printer at a specific point in the print cycle; such as "before the paper reaches the Fuser". You may have to use trial and error until you are able to stop the print cycle at the exact point requested.

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7.1 Disassembly and Reassembly Procedures (DRP)

This section contains the Disassembly and Reassembly Procedures for major parts and subsystems within the Large Capacity Input Feeder.

7.1.1 Preparation

Before you begin any LCIF Removal and Replacement Procedure:

1. Switch OFF the printer power.
2. Disconnect the AC power cord from the wall outlet.
3. Wear an electrostatic discharge wrist strap to protect sensitive printer PWBs from damage.

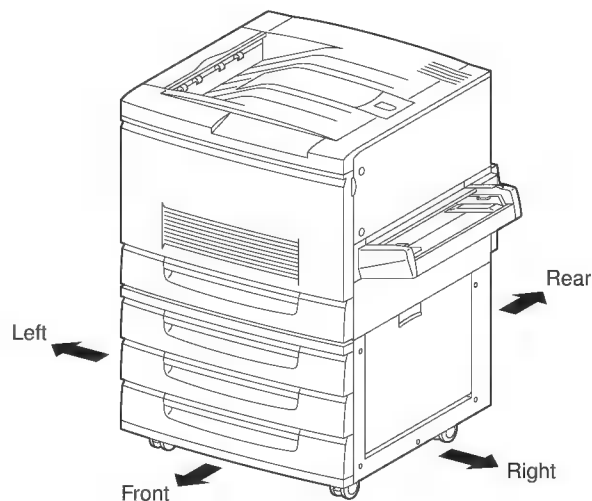
7.1.2 Work Note

Names of parts that appear in the DRPs may not be exactly the same as the names appear in the Parts List. For example, a part called the Metal Registration Roll in an DRP may appear on the Parts List as Registration Metal Roll.

Always reinstall the correct type and size screws. Using the wrong screw can damage tapped holes. Do not use excessive force to either remove or install a part.

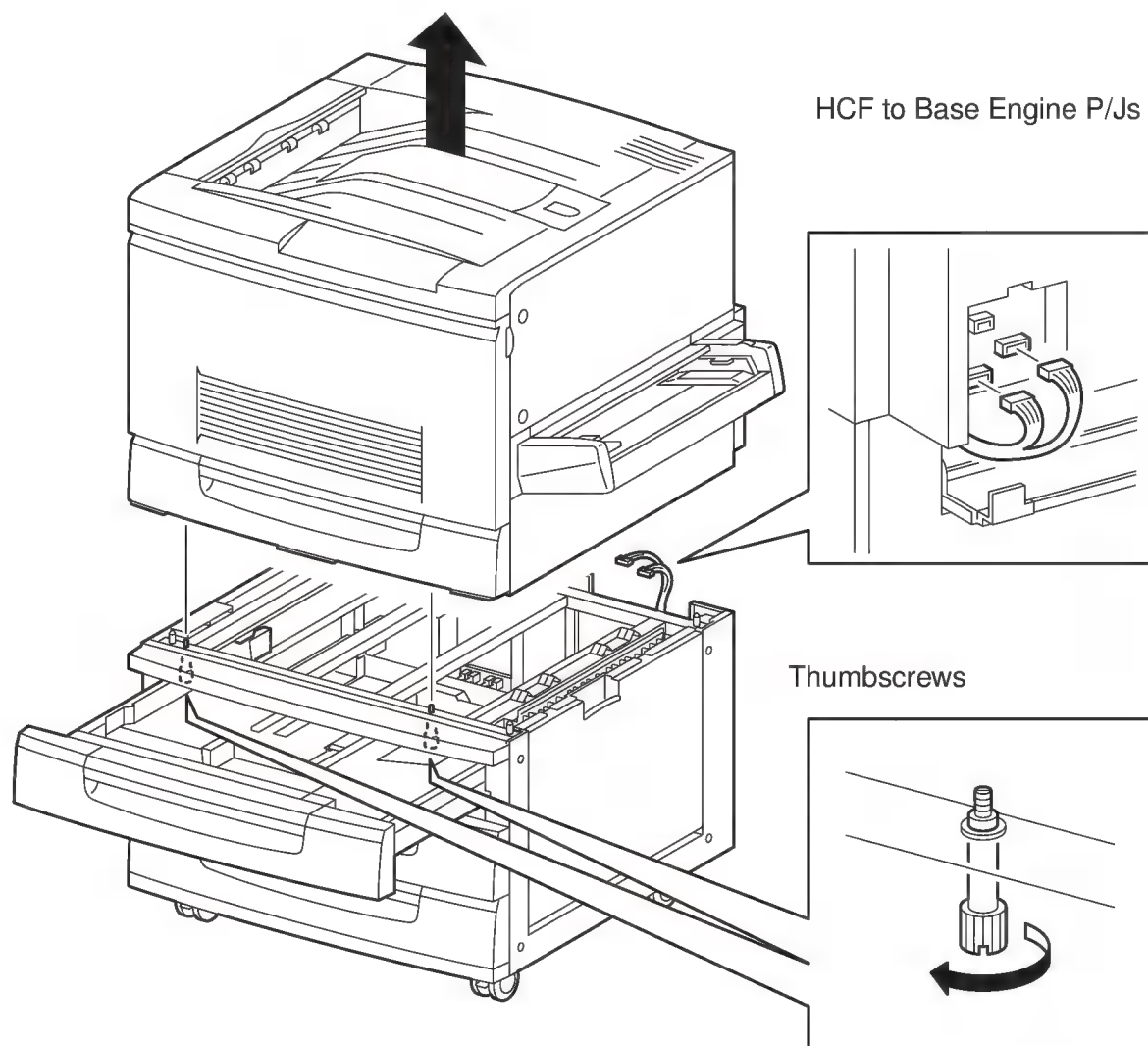
7.1.3 Notations in the DRP text

- Locations, such as R or right, given in the DRPs assume you are facing the printer console panel.



- The notation "rear" of a component refers to the side of the component that is, when installed, facing the rear of the print engine.
- The notation "front" of a component, in place or removed, refers to the side of the component that is, when installed, facing the front of the print engine.
- The notation "(DRP X.Y)" in a DRP step, directs you to another DRP for information on how to perform a related or pre-requisite procedure.
- The notation "(Figure X.Y)" points to the illustration that corresponds to the DRP you are performing.
- The notation "(PLX)" indicates that this component is listed in the PLX parts list.
- Arrows in an illustration show direction of movement when removing a component.
- Slashes in a part name indicate that numerous components share the same heading and function. For example, "Gears In/Feed/Out" refers to Gear In, Gear Feed, and Gear Out.

DRP 7.2 Large-Capacity Input Feeder (PL20.1.1)



DRP 7.2 Large Capacity Input Feeder (PL20.1.1)

Removal

1. Lock down the four LCIF casters.
2. Remove the Option Harness Cover from the printer Rear Cover.
3. Disconnect the plugs that are located under the Option Harness Cover.
4. Slide OPT1 Tray out of the LCIF so you can access the two thumbscrews that are located at the top- front of the LCIF.
5. Loosen the two thumbscrews that secure the LCIF to the printer frame.
6. Slide OPT1 Tray into the LCIF.
7. With the help of three other people, carefully lift the printer off of the LCIF.



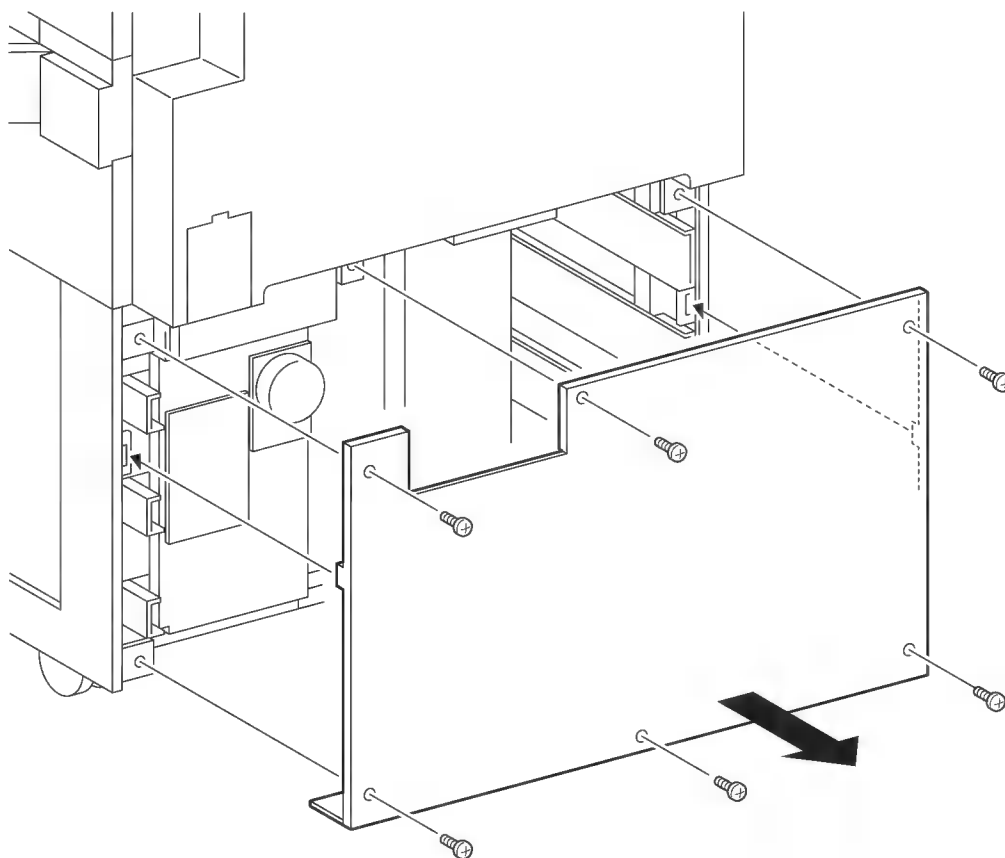
The print engine is extremely heavy. Lifting the print engine is a four person job. Do not attempt to lift the print engine without help.

8. Place the base printer on a flat and stable work surface.

Replacement

1. Lock down the four LCIF casters.
2. With the help of three other people, lower the printer onto the LCIF making sure the locating pins on the top of the LCIF slide into the locating holes in the bottom of the printer frame.
3. Slide OPT1 Tray out of the LCIF.
4. Tighten the two thumbscrews, located at the top-front of the LCIF, to secure the LCIF to the printer frame.
5. Slide OPT1 Tray into the LCIF.
6. Reconnect the plugs into the jacks that are located under the Option Harness Cover.
7. Reinstall the Option Harness Cover to the printer Rear Cover.
8. Unlock the four LCIF casters.

DRP 7.3 LCIF Rear Cover (PL21.1.2)



DRP 7.3 LCIF Rear Cover (PL21.1.2)

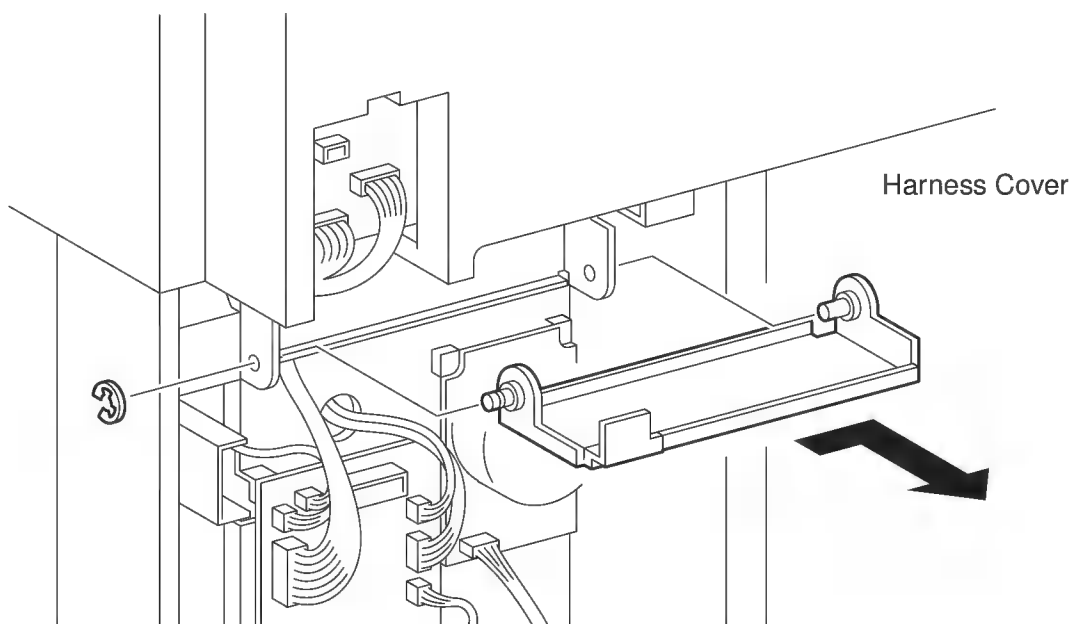
Removal

1. Remove the six screws securing the Rear Cover to the LCIF.
2. Pull the Rear Cover away from the LCIF frame.

Replacement

1. Reinstall the Rear Cover onto the LCIF frame.
2. Reposition the Rear Cover so the six screw holes in the Cover line up with the six screw holes in the LCIF frame.
3. Use six screws to secure the Rear Cover to the LCIF frame.

DRP 7.4 LCIF Harness Cover (PL21.1.3)



DRP 7.4 LCIF Harness Cover (PL21.1.3)

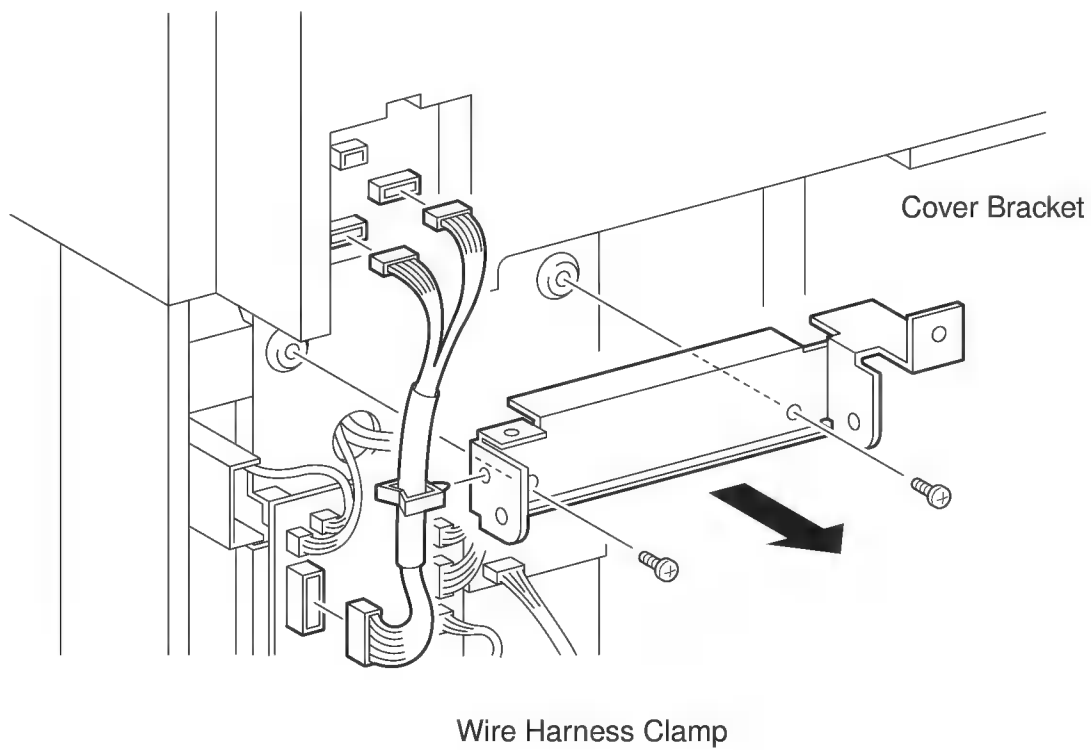
Removal

1. Remove the LCIF Rear Cover (DRP 7.2).
2. Open the LCIF Harness Cover and free the wire harness from the Wire Harness Clamp.
3. Remove the E ring securing the LCIF Harness Cover to the LCIF frame.
4. Slide the Harness Cover to the front of the LCIF and remove the Cover from the LCIF frame.

Replacement

1. Reinstall the LCIF Harness Cover onto the LCIF frame by sliding the two pivot arms of the Cover into the two holes in the frame.
2. Use one E ring to secure the Cover to the LCIF frame.
3. Reinstall the wire harness into the Wire Harness Clamp.
4. Reinstall the LCIF Rear Cover (DRP 7.2).

DRP 7.5 Cover Bracket (PL21.1.4)



DRP 7.5 Cover Bracket (PL21.1.4)

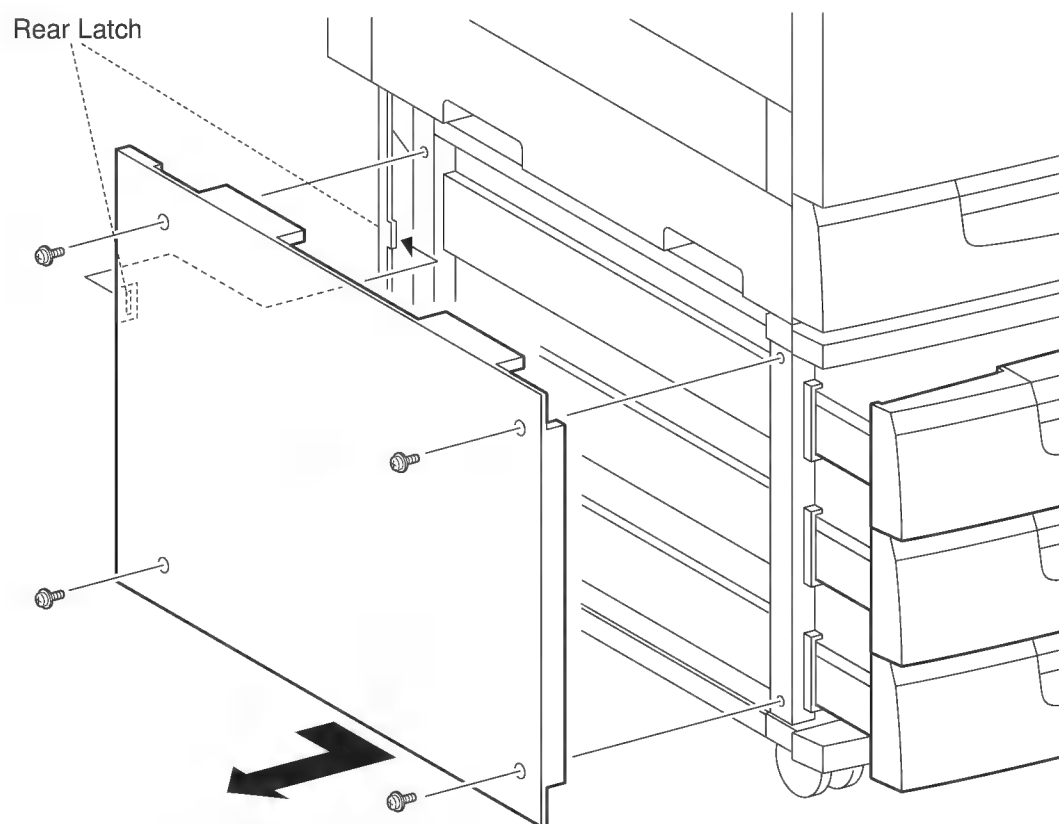
Removal

1. Remove the LCIF Harness Cover (DRP 7.3).
2. Remove the Wire Harness Clamp from the Cover Bracket.
3. Remove the two screws securing the Cover Bracket to the LCIF frame and remove the Bracket.

Replacement

1. Reinstall the Cover Bracket onto the LCIF frame.
2. Line up the two screw holes in the Bracket with the two screw holes in the LCIF frame.
3. Use two screws to secure the Bracket to the frame.
4. Reinstall the Wire Harness Clamp onto the Cover Bracket.
5. Reinstall the LCIF Harness Cover (DRP 7.3).

DRP 7.6 LCIF Left Cover (PL21.1.10)



DRP 7.6 LCIF Left Cover (PL21.1.10)

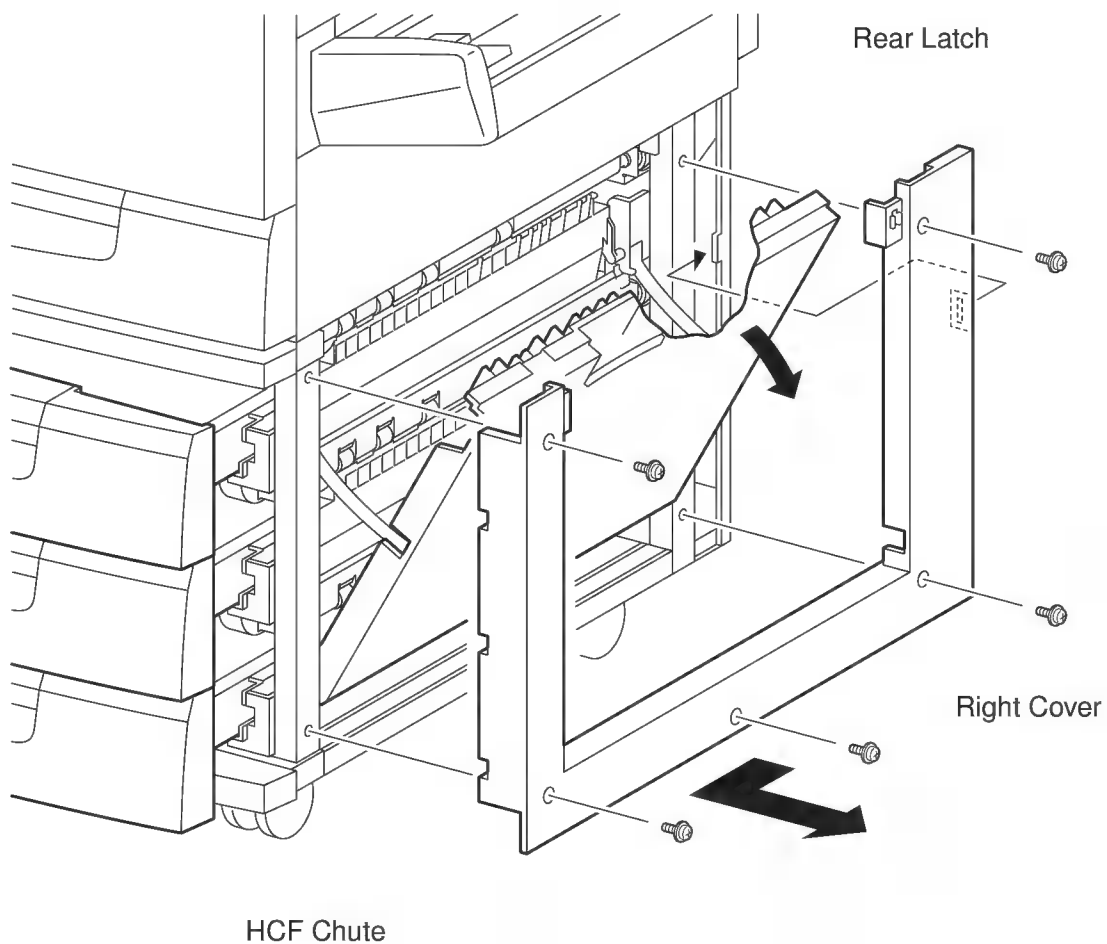
Removal

1. Slide Trays 2, 3, and 4 a few inches out of the LCIF.
2. Remove the four screws securing the LCIF Left Cover to the LCIF frame
3. Slide the Left Cover to the front, to feed the rear latch, and remove the Cover.

Replacement

1. Slide Trays 2, 3, and 4 a few inches out of the LCIF.
2. Reinstall the LCIF Left Cover to the LCIF frame by sliding the rear latch into the tab at the rear of the LCIF.
3. Use four screws to secure the Cover to the frame.
4. Slide Trays 2, 3, and 4 back into the LCIF.

DRP 7.7 LCIF Right Cover (PL21.1.20)



DRP 7.7 LCIF Right Cover (PL21.1.20)

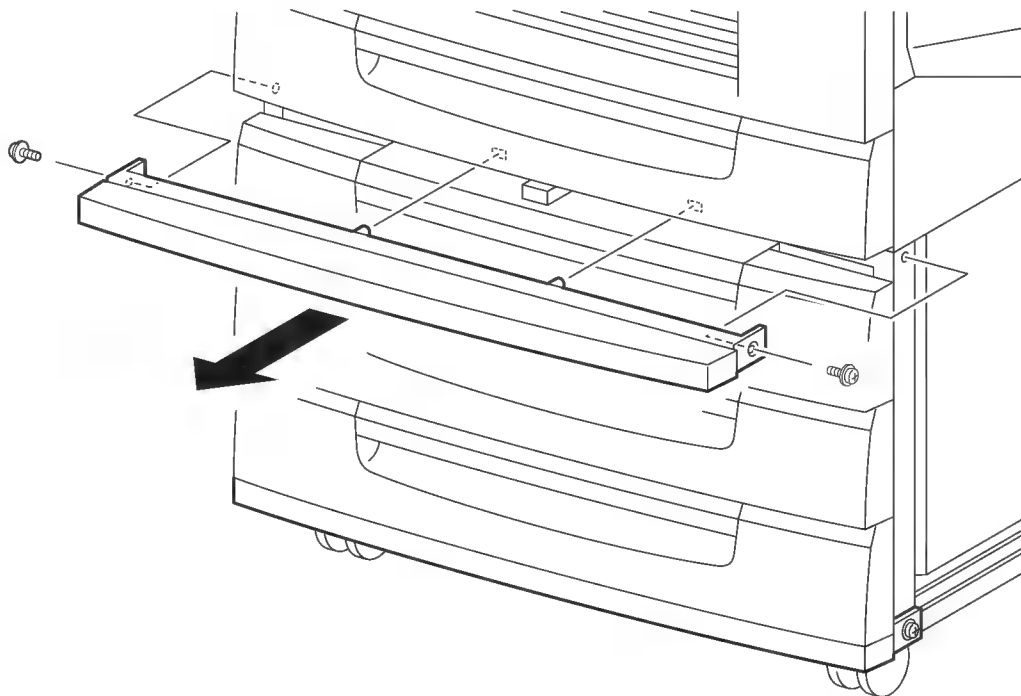
Removal

1. Slide Trays 2, 3, and 4 a few inches out of the LCIF.
2. Remove the five screws securing the LCIF Right Cover to the LCIF frame and remove the Cover.
3. Open the LCIF Cover.
4. Slide the Right Cover to the front, to feed the rear latch, and remove the Cover.

Replacement

1. Slide Trays 2, 3, and 4 a few inches out of the LCIF.
2. Open the LCIF Cover.
3. Reinstall the LCIF Right Cover to the LCIF frame by sliding the rear latch into the tab at the rear of the LCIF.
4. Close the LCIF Cover.
5. Reposition the LCIF Right Cover so the five screw holes in the Cover line up with the five screw holes in the LCIF frame.
6. Use five screws to secure the Right Cover to the LCIF frame.
7. Slide Trays 2, 3, and 4 back into the LCIF.

DRP 7.8 LCIF Front Cover (PL21.1.1)



DRP 7.8 LCIF Front Cover (PL21.1.1)

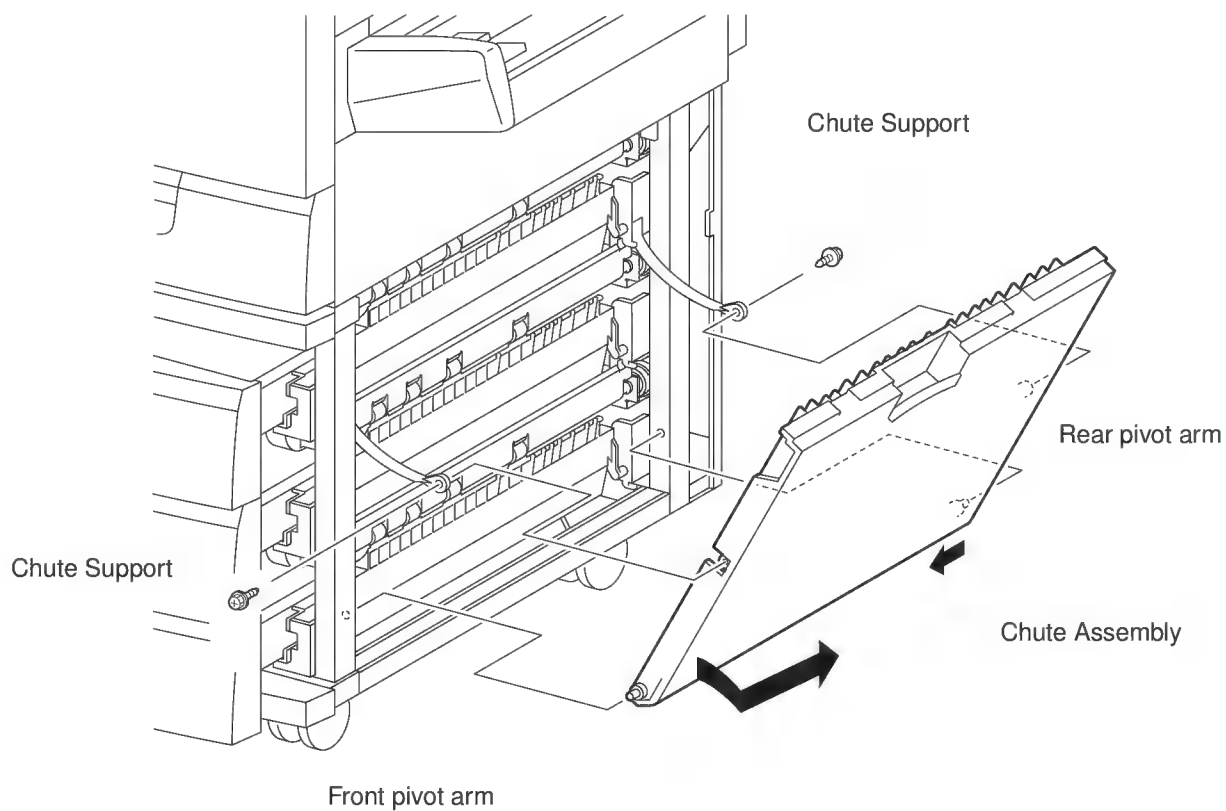
Removal

1. Remove the LCIF Left Cover (DRP 7.5).
2. Remove the LCIF Right Cover (DRP 7.6).
3. Remove the two screws securing the Front Cover to the front of the LCIF frame and remove the Cover.

Replacement

1. Slide OPT1 Tray a few inches out of the LCIF.
2. Line up the two locating pins on the back of the LCIF Front Cover with the two locating holes in the LCIF frame and reinstall the LCIF Front Cover onto the LCIF frame.
3. Use two screws to secure the Front Cover to the LCIF frame.
4. Reinstall the LCIF Right Cover (DRP 7.6).
5. Reinstall the LCIF Left Cover (DRP 7.5).

DRP 7.9 LCIF Cover Assembly (PL21.1.30)



DRP 7.9 LCIF Cover Assembly (PL21.1.30)

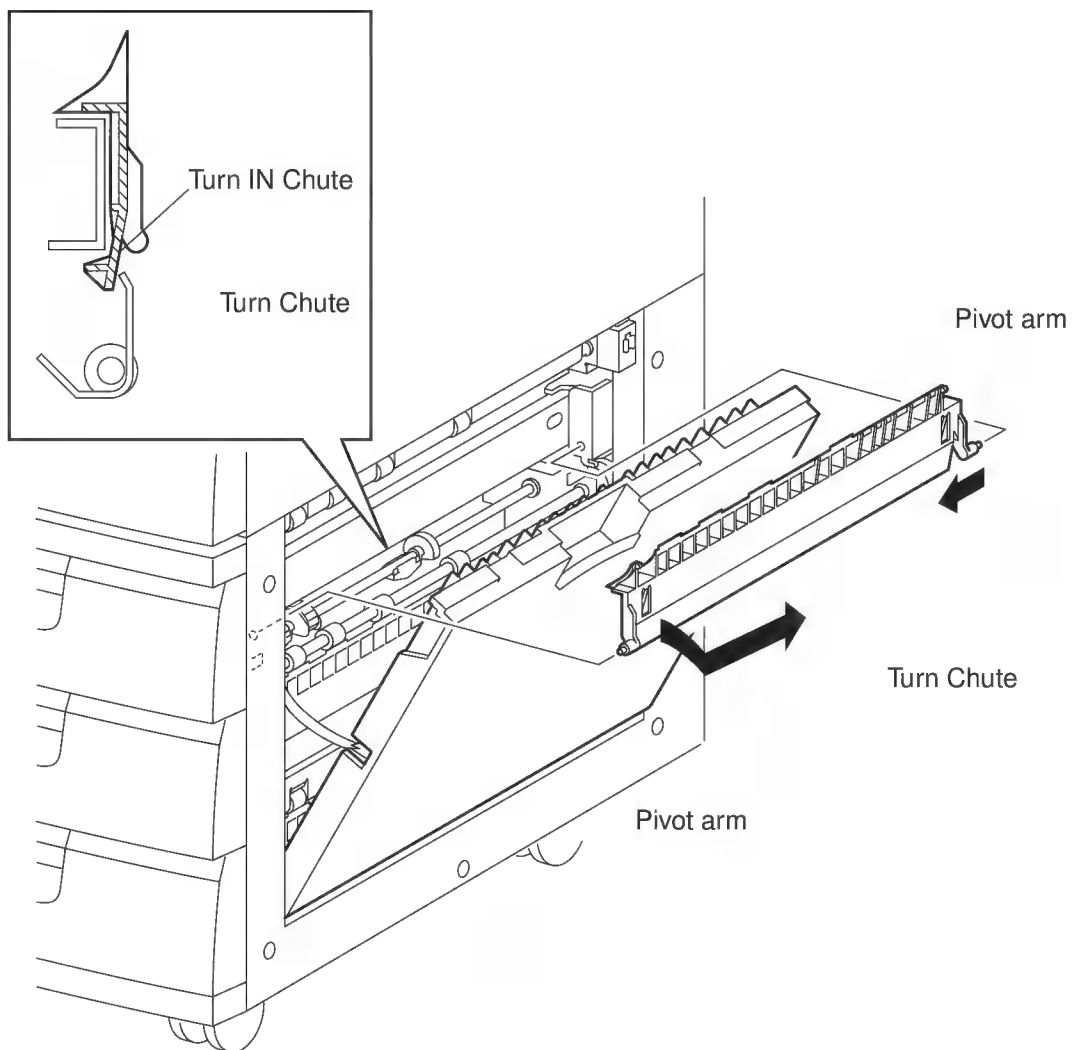
Removal

1. Remove the LCIF Right Cover (DRP 7.6).
2. Open the LCIF Cover.
3. Remove the two screws securing the ends of the two Cover Supports to the Cover and free the ends of the Supports.
4. Push the Cover Assembly to the front of the LCIF frame so the rear pivot arm snaps free of the rear pivot hole and remove the Cover from the frame.

Replacement

1. Install the front pivot arm of the LCIF Cover Assembly into the front pivot hole in the LCIF frame.
2. Install the rear pivot arm of the LCIF Cover Assembly into the rear pivot hole in the LCIF frame.
3. Reinstall the ends of the two Cover Supports onto the posts on the sides of the LCIF Cover.
4. Use two screws to secure the ends of the Cover Supports to the LCIF Cover.
5. Close the LCIF Cover.

DRP 7.10 Turn IN Cover (PL22.1.3)



DRP 7.10 Turn IN Cover (PL22.1.3)

Use this procedure to remove and replace the Turn IN Covers for OPT1 Tray, OPT2 Tray, or OPT3 Tray of the LCIF.

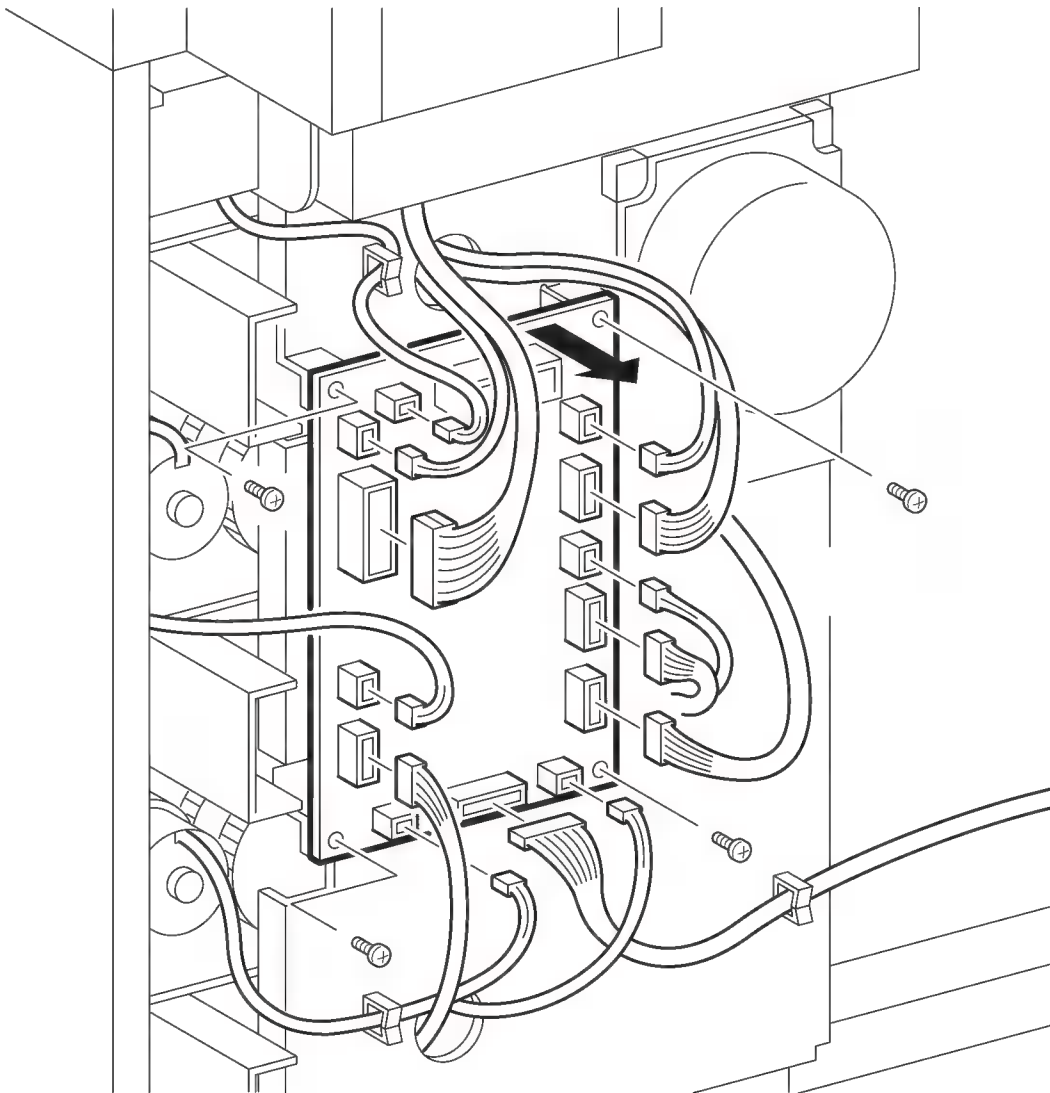
Removal

1. Remove the LCIF Cover Assembly (DRP 7.8).
2. Press in on the pivot arms of the Turn IN Cover and remove them from the pivot holes in the HFC frame.

Replacement

1. Insert the front pivot arm of the Turn IN Cover into the front pivot hole in the HFC frame.
2. Press in on the rear pivot arm of the Turn IN Cover and insert it into the rear pivot hole in the HFC frame.
3. Position the bottom lip of the Turn IN Cover so it is behind the top lip of the adjacent Turn Cover.

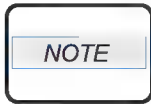
DRP 7.11 Feeder PWB (PL22.1.8)



DRP 7.11 Feeder PWB (PL22.1.8)

Removal

1. Remove the LCIF Rear Cover (DRP 7.2).
2. Disconnect the thirteen P/Js that are connected to the Feeder PWB.
3. Remove the four screws securing the Feeder PWB to the LCIF frame and remove the PWB.



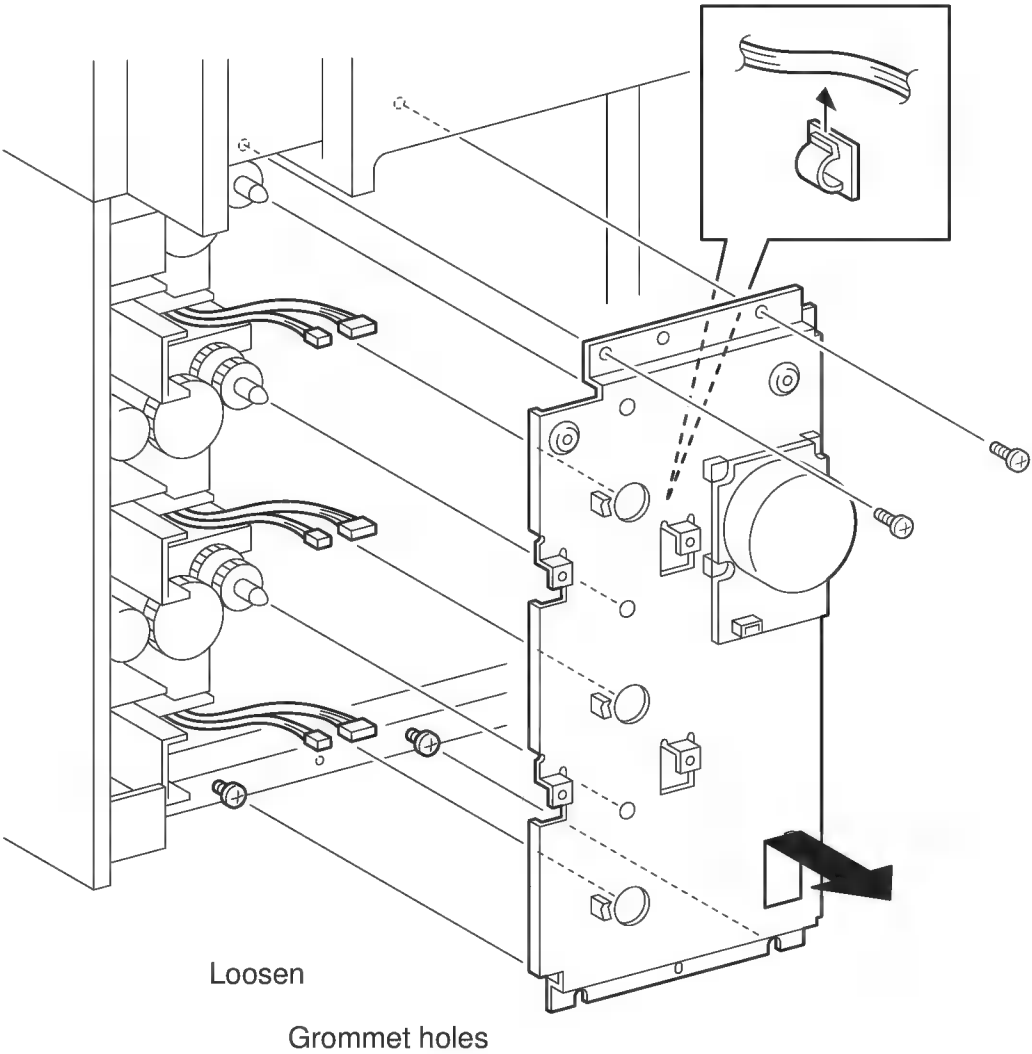
Wear an electrostatic wrist strap and use caution when working with the Feeder PWB. Static electricity can damage the sensitive electronics of the Feeder PWB.

Handle the Feeder PWB by the edges of the board. Never touch any of the ICs that are mounted on the PWB.

Replacement

1. Reinstall the Feeder PWB onto the LCIF frame.
2. Reposition the PWB so the four screw holes in the PWB line up with the four screw holes in the LCIF frame.
3. Use four screws to secure the Feeder PWB to the LCIF frame.
4. Reconnect the thirteen P/Js to the Feeder PWB.
5. Reinstall the LCIF Rear Cover (DRP 7.2).

DRP 7.12 LCIF Motor Assembly (PL22.1.5)



DRP 7.12 LCIF Motor Assembly (PL22.1.5)

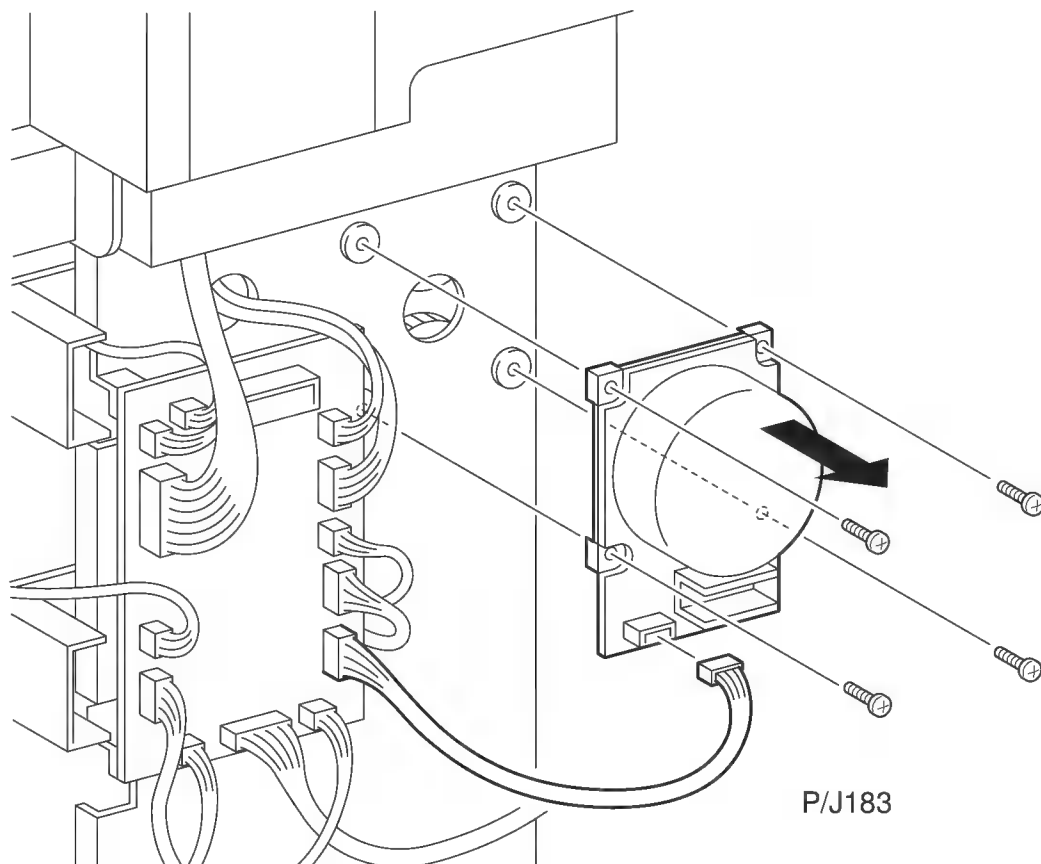
Removal

1. Remove the Cover Bracket (DRP 7.4).
2. Remove the Feeder PWB (DRP 7.10).
3. Free the Feed Solenoid and Sensor wires from the three wire clips that are attached to the front of the Motor Assembly
4. Loosen, but do not remove, the two screws securing the bottom of the Motor Assembly to the LCIF frame.
5. Remove the two screws securing the top of the Motor Assembly to the LCIF frame and remove the Assembly.
6. Pull the Feed Solenoid and Sensor wires through the grommet holes in the Assembly.

Replacement

1. Insert the Feed Solenoid and Sensor wires through the grommet holes in the LCIF Motor Assembly.
Insert OPT1 Tray wires through the top hole, OPT2 Tray wires through the middle hole, and OPT3 Tray wires through the bottom hole.
2. Slide the bottom of the LCIF Motor Assembly behind the two loosened screws that are located at the bottom of the LCIF frame.
3. Reposition the LCIF Motor Assembly so the top two screw holes in the Assembly line up with the top two screw holes in the LCIF frame.
4. Use two screws to secure the top of the LCIF Motor Assembly to the LCIF frame.
5. Tighten the two bottom screws to secure the bottom of the LCIF Motor Assembly to the LCIF frame.
6. Secure the Feed Solenoid and Sensor wires into the three wire clips that are attached to the front of the Motor Assembly
7. Reinstall the Feeder PWB (DRP 7.10).
8. Reinstall the Cover Bracket (DRP 7.4).

DRP 7.13 LCIF Motor (PL22.1.6)



DRP 7.13 LCIF Motor (PL21.2.6)

Removal

1. Remove the LCIF Rear Cover (DRP 7.2).
2. Disconnect P/J 183 from the Motor PWB.
3. Remove the four screws securing the LCIF Motor to the Gear Assembly and remove the Motor.

Replacement

1. Reinstall the LCIF Motor onto the Gear Assembly by inserting the Motor drive shaft into the drive shaft hole in the Gear Assembly.
2. Reposition the LCIF Motor so the four screw holes in the Motor PWB line up with the four screw holes in the Gear Assembly.
3. Use four screws to secure the LCIF Motor to the Gear Assembly.
4. Reconnect P/J 183 to the Motor PWB.
5. Reinstall the LCIF Rear Cover (DRP 7.2).

DRP 7.14 Size Switch Assemblies (PL22.1.15)

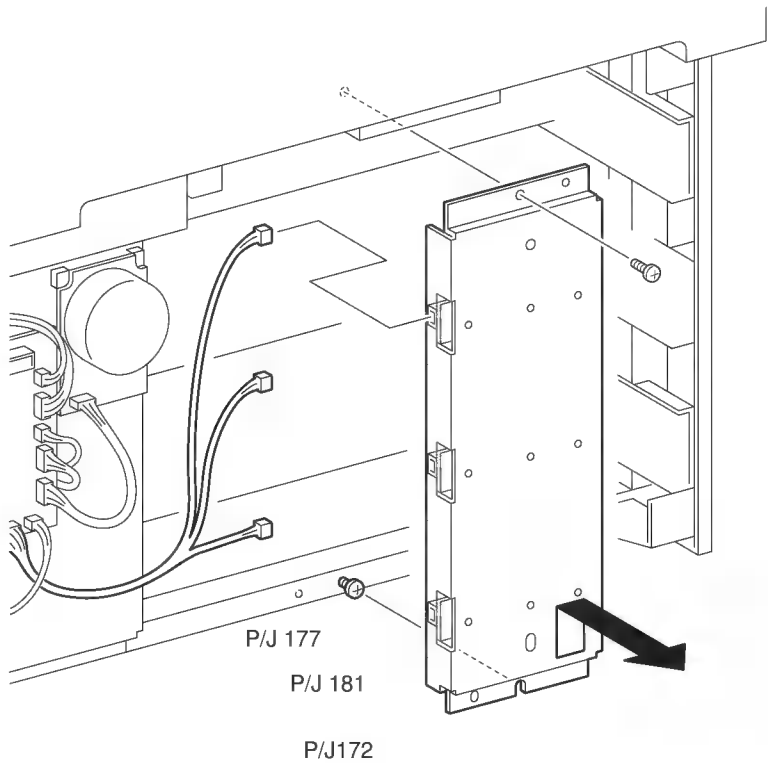


Figure 1

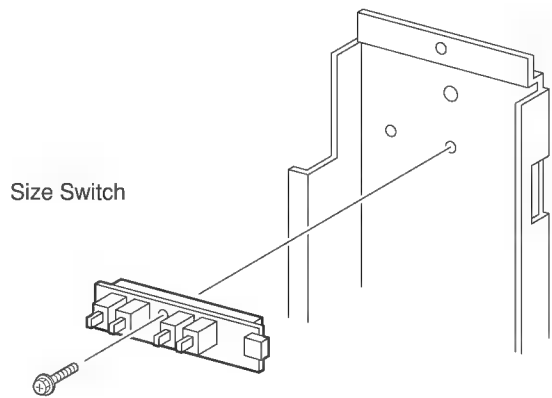


Figure 2

DRP 7.14 Size Switch Assemblies (PL22.1.15)

Use this procedure to remove and replace the Size Switch Assembly for OPT1 Tray, OPT2 Tray, or OPT3 Tray of the LCIF.

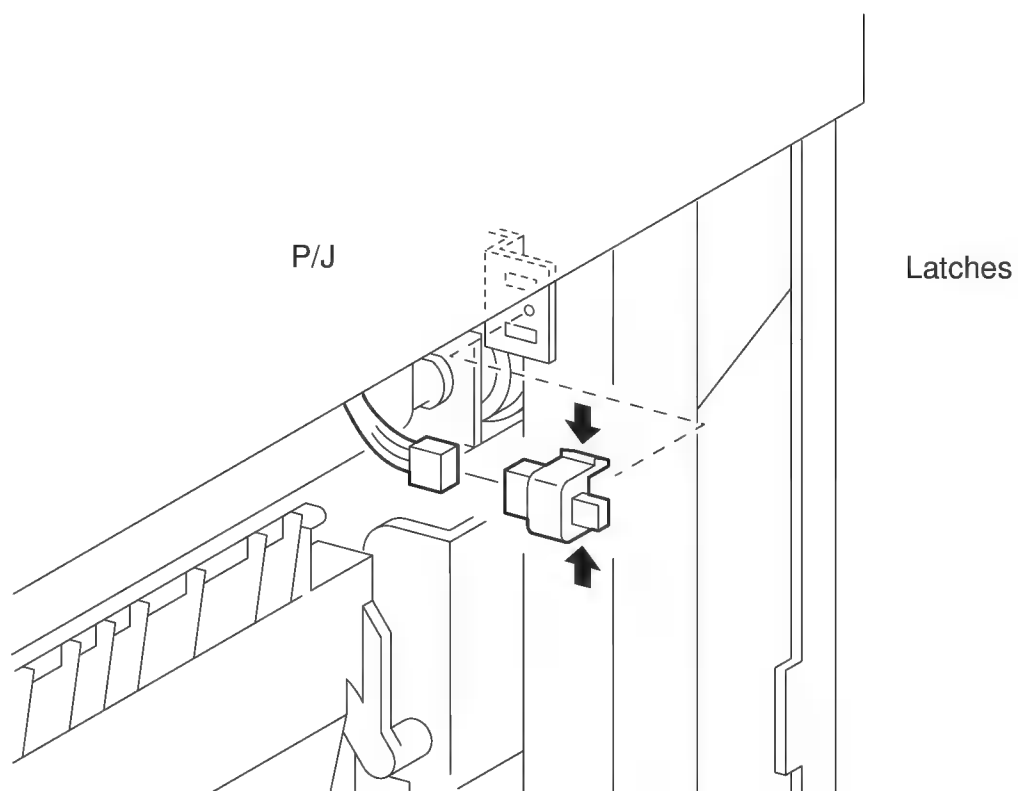
Removal

1. Remove the LCIF Rear Cover (DRP 7.2).
2. Disconnect P/J 172, P/J 177, and P/J 181 from the three Size Switches that are attached to the Size Bracket.
3. Loosen, but do not remove, the screw securing the bottom of the Size Bracket to the LCIF frame.
4. Remove the screw securing the top of the Size Bracket to the LCIF frame and remove the Size Bracket, along with the three attached Size Switches, from the frame (Figure 1).
5. Remove the screw securing the Size Switch Assembly that you want to remove and lift the Assembly off of the Bracket (Figure 2).

Replacement

1. Position the Size Switch Assembly against the Size Bracket so the P/J connector on the Assembly protrudes through the cutout in the Bracket.
2. Reposition the Size Switch Assembly so the locating tabs on the bottom of the Assembly fit through the locating holes in the Bracket.
3. Use one screw to secure the Size Switch Assembly to the Size Bracket.
4. Slide the bottom of the Size Bracket behind the loosened screw that is located at the bottom of the LCIF frame.
5. Reposition the Size Bracket so the top screw hole in the Assembly lines up with the top screw hole in the LCIF frame.
6. Use one screw to secure the top of the Size Bracket to the LCIF frame.
7. Tighten the bottom screw to secure the bottom of the Size Bracket to the LCIF frame.
8. Reconnect P/J 172, P/J 177, and P/J 181 to the three Size Switches.
9. Reinstall the LCIF Rear Cover (DRP 7.2).

DRP 7.15 Feeder Cover Switch (PL22.1.16)



DRP 7.15 Feeder Cover Switch (PL22.1.16)

Use this procedure to remove and replace both Feeder Cover Switches.

Removal

1. Remove the LCIF Right Cover (DRP 7.6)
2. Press together the Feeder Cover Switch latches as you remove the Switch from the LCIF frame.
3. Disconnect the P/J from the Switch.

Replacement

1. Reconnect the P/J to the Feeder Cover Switch.
2. Position the Feeder Cover Switch so the actuator faces out and press the Switch latches against the cutout in the LCIF frame. The Switch snaps in to place.
3. Reinstall the LCIF Right Cover (DRP 7.6).

DRP 7.16 LCIF Drive Assembly (PL22.1.1)

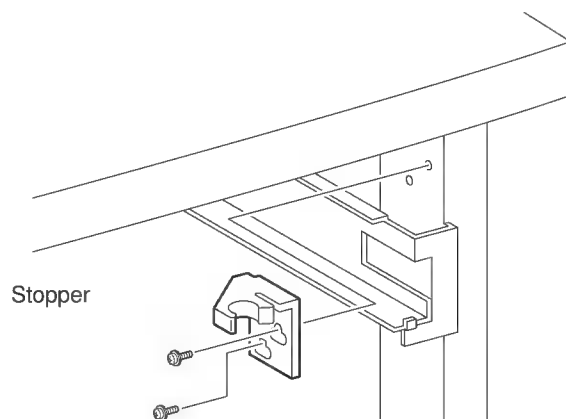


Figure 1

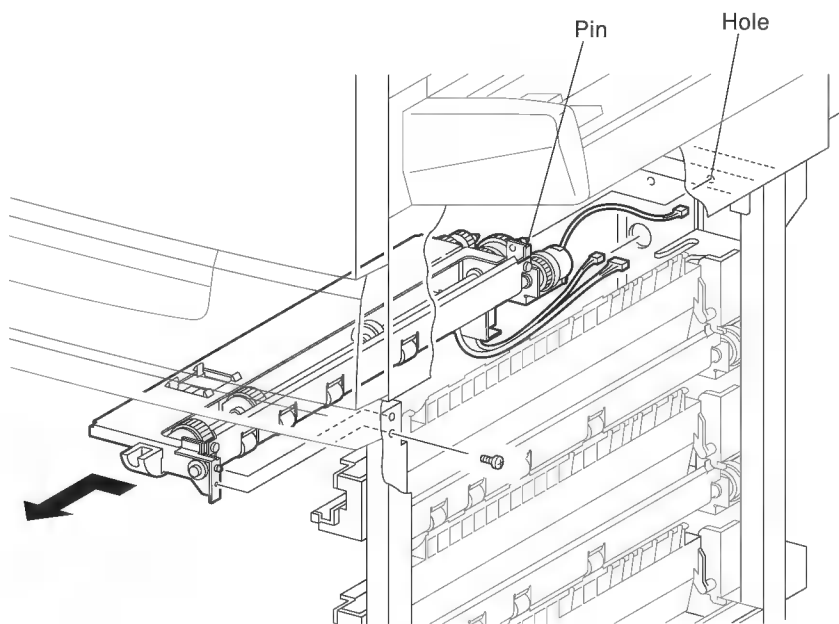


Figure 2

DRP 7.16 LCIF Drive Assembly (PL22.1.1)

Use this procedure to remove and replace the LCIF Drive Assembly for OPT1 Tray, OPT2 Tray, or OPT3 Tray of the LCIF.

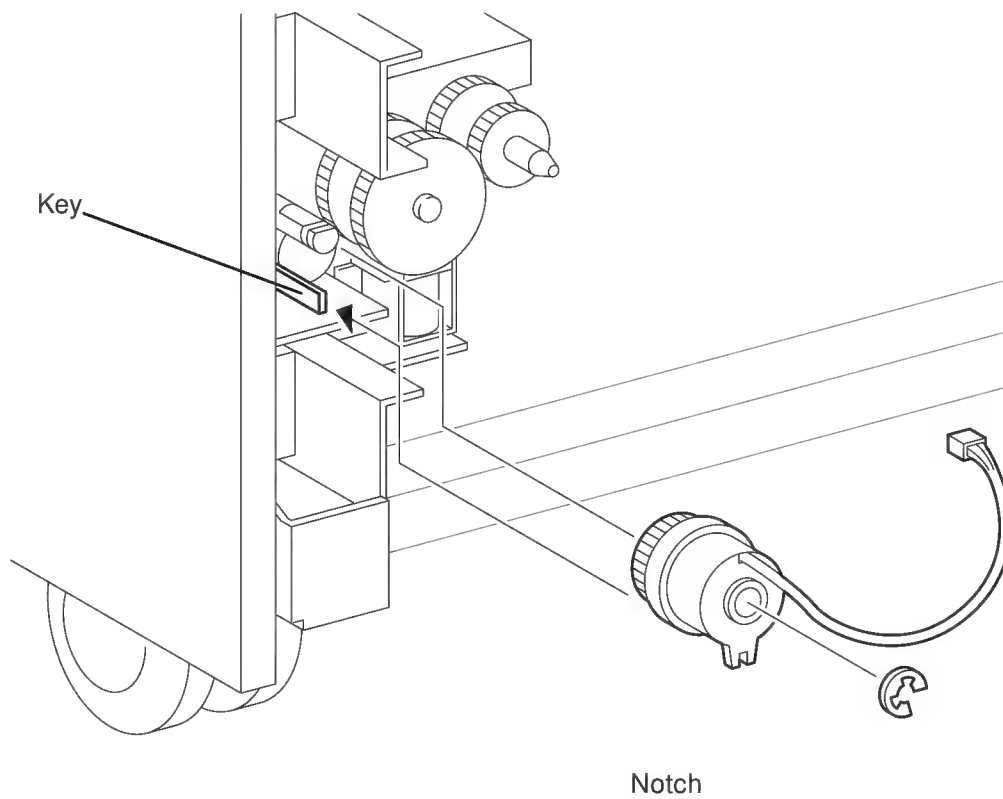
Removal

1. Remove the Tray from the LCIF.
2. Remove the Right Cover (DRP 7.6).
3. Remove the LCIF Motor Assembly (DRP 7.11).
4. Remove the two screws securing the Tray Stopper to the LCIF frame and remove the Stopper (Figure 1).
5. Remove any wire harnesses that are attached to the Drive Assembly.
6. Remove the screw securing the LCIF Drive Assembly to the front-right of the LCIF frame (Figure 2).
7. Pull the LCIF Drive Assembly to the front of the LCIF so the rear locating pin of the Drive Assembly is freed from the locating hole in the frame, and remove the Assembly out through the empty paper feeder.

Replacement

1. Reinstall the LCIF Drive Assembly by inserting the rear locating pin of the Assembly into the corresponding locating in the rear of the LCIF frame.
2. Position the front of the LCIF Drive Assembly so the screw hole and locating tab in the Assembly line up with the screw hole and locating hole in the front of the LCIF Frame.
3. Use one screw to secure the LCIF Drive Assembly to the front-right of the LCIF frame.
4. Reinstall any wire harnesses that were attached to the Drive Assembly.
5. Reinstall the Tray Stopper to the LCIF frame and use two screws to secure the Stopper.
6. Reinstall the LCIF Motor Assembly (DRP 7.11).
7. Reinstall the Right Cover (DRP 7.6).
8. Reinstall the Tray.

DRP 7.17 Turn Clutch (PL22.2.26)



DRP 7.17 Turn Clutch (PL22.2.26)

Use this procedure to remove and replace the Turn Clutch for OPT1 Tray, OPT2 Tray, or OPT3 Tray of the LCIF.

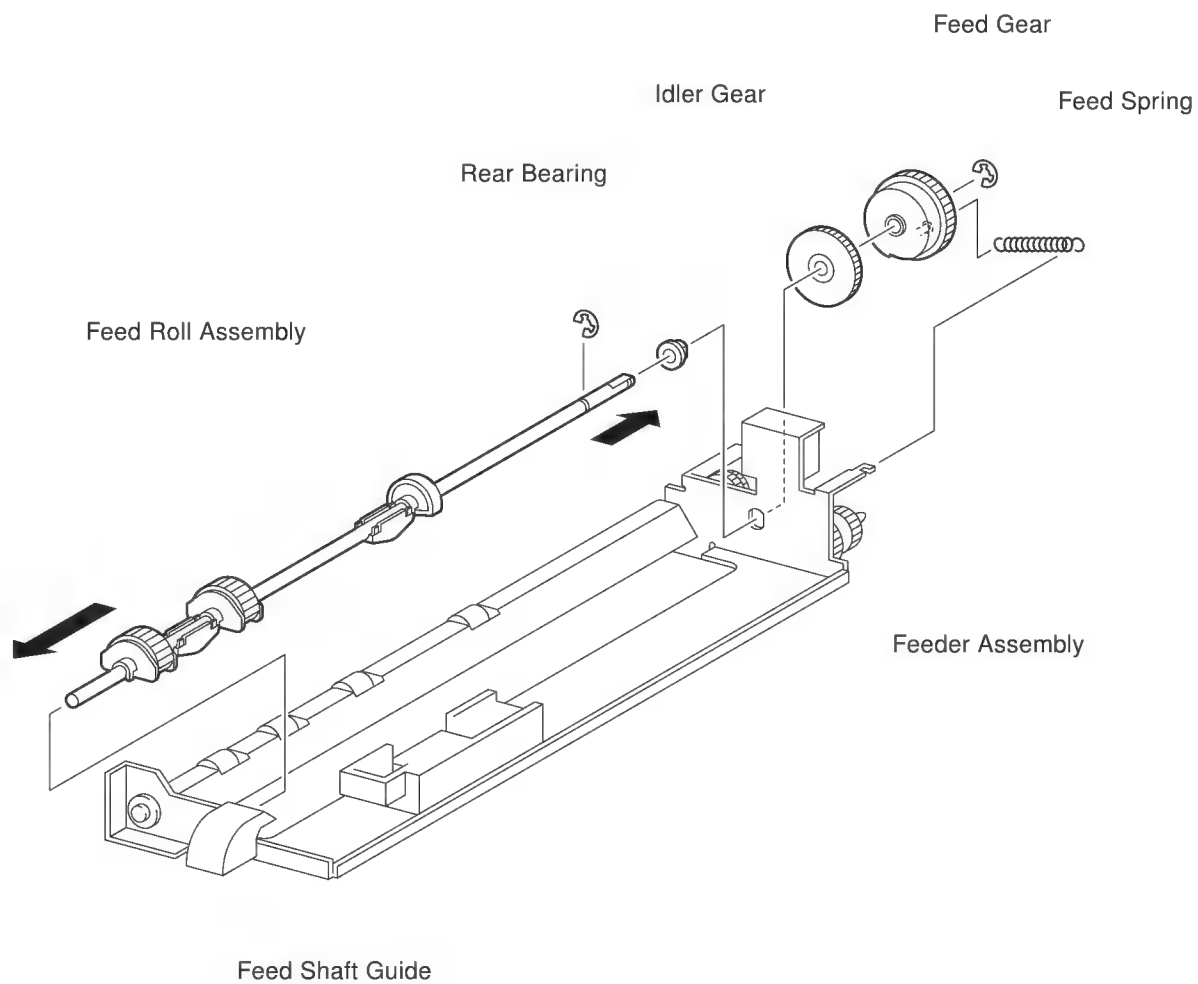
Removal

1. Remove the LCIF Rear Cover (DRP 7.2).
2. Free the Turn Clutch wire harness from the wire clamp that is located on the LCIF frame.
3. Disconnect the Turn Clutch P/J from the Feeder PWB.
4. Disconnect the E ring securing the Turn Clutch to the Turn Roll shaft and remove the Clutch.

Replacement

1. Slide the Turn Clutch onto the Turn Roll shaft making sure the metal key on the frame fits through the notch on the Clutch.
2. Use an E ring to secure the Clutch to the shaft.
3. Reconnect the Turn Clutch P/J to the Feeder PWB.
4. Hook the Turn Clutch wire harness into the wire clamp that is located on the LCIF frame.
5. Reinstall the LCIF Rear Cover (DRP 7.2).

DRP 7.18 Feed Roll Assembly (PL22.2.13)



DRP 7.18 Feed Roll Assembly (PL22.2.13)

Use this procedure to remove and replace the Feed Roll Assembly for OPT1 Tray, OPT2 Tray, or OPT3 Tray of the LCIF.

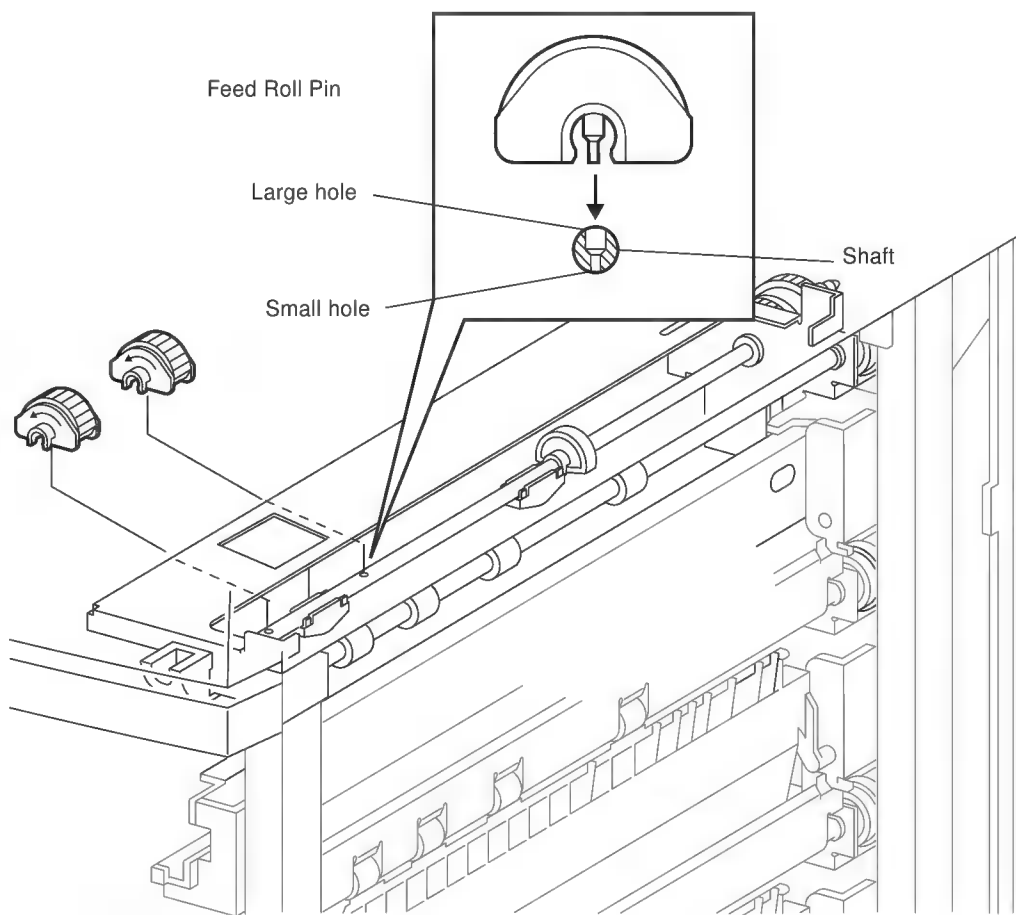
Removal

1. Remove the LCIF Drive Assembly (DRP 7.15).
2. Place the LCIF Drive Assembly on a flat and stable work surface.
3. Remove the Feed Spring from the Feed Gear.
4. Remove the E ring securing the Feed Gear to the Feed Roll shaft and remove the Gear.
5. Remove the Idler Gear.
6. Remove the E ring securing the Feed Roll shaft to the rear bearing.
7. Slide the Feed Roll Assembly far enough to the rear of the Feeder Assembly so the front of the Feed Roll Assembly clears the Guide.
8. Remove the Feed Roll Assembly from the Feeder Assembly.

Replacement

1. Slide the rear bearing, lip facing in, over the end of the Feed Roll Assembly shaft.
2. Insert the rear of the Feed Roll Assembly shaft into the cutout in the rear of the Drive Assembly.
3. Insert the front of the Feed Roll Assembly shaft into the Guide that is located at the front of the Drive Assembly.
4. Insert the rear bearing into the cutout and use an E ring to secure the Feed Roll shaft to the rear bearing.
5. Reinstall the Idler Gear onto the end of the Feed Roll Assembly shaft.
6. Push the Feed Solenoid arm out of the way as you reinstall the Feed Gear onto the end of the Feed Roll shaft.
7. Use an E ring to secure the Feed Gear to the end of the Feed shaft.
8. Reattach the Feed Spring to the Feed Gear.
9. Reinstall the LCIF Drive Assembly (DRP 7.15).

DRP 7.19 Feed Roll (PL22.2.15)



DRP 7.19 Feed Roll (PL22.2.15)



We recommend that you replace Feed Rolls as a set.

If you have difficulty replacing the Feed Rolls as described in the following steps, we suggest that you first remove the LCIF Drive Assembly (DRP 7.15) to make Feed Roll removal and replacement easier.

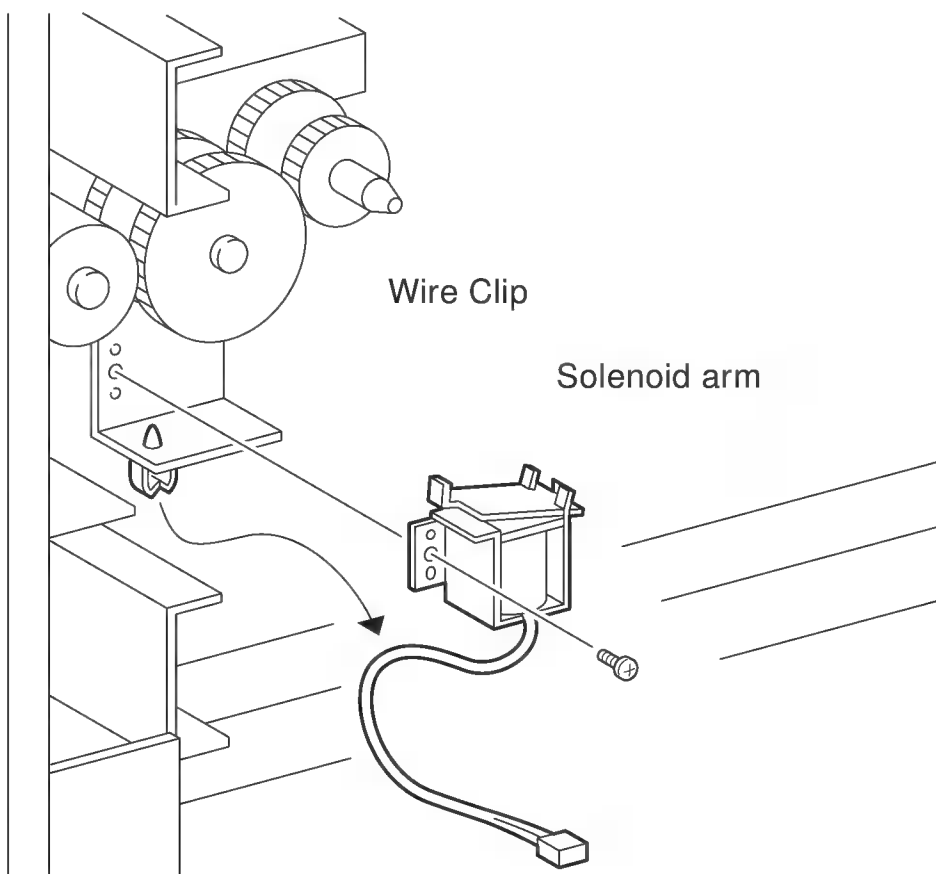
Removal

1. Remove the Tray Sensor Assembly (DRP 7.22) but do not disconnect the Sensor P/J.
2. Reach in through the empty Paper Tray cavity and push the Feed Roll off of the Feed Roll shaft.

Replacement

1. Insert the Feed Roll pin into the large end of the Feed Roll hole and firmly press the Feed Roll onto the shaft.
2. Reinstall the Tray Sensor Assembly (DRP 7.22).

DRP 7.20 Feed Solenoid (PL22.2.21)



DRP 7.20 Feed Solenoid (PL22.2.21)

Use this procedure to remove and replace the Feed Solenoid for OPT1 Tray, OPT2 Tray, or OPT3 Tray of the LCIF.

Removal

1. Remove the LCIF Motor Assembly (DRP 7.11).
2. Free the Feed Solenoid wire harness from the harness clip.
3. Remove the screw securing the Feed Solenoid to the LCIF frame.
4. Push down on the Feed Solenoid arm and remove the Solenoid from the LCIF frame.

Replacement

1. Position the Feed Solenoid as shown in the illustration.
2. Push down on the Feed Solenoid arm as you reinstall the Solenoid onto the LCIF frame.
3. Line up the three holes in the Solenoid with the screw hole and two positioning tabs on the frame.
4. Use one screw to secure the Feed Solenoid to the LCIF frame.
5. Secure the Feed Solenoid wire harness to the harness clip.
6. Reinstall the LCIF Motor Assembly (DRP 7.11).

DRP 7.21 Turn Roll Assembly (PL22.2.24)

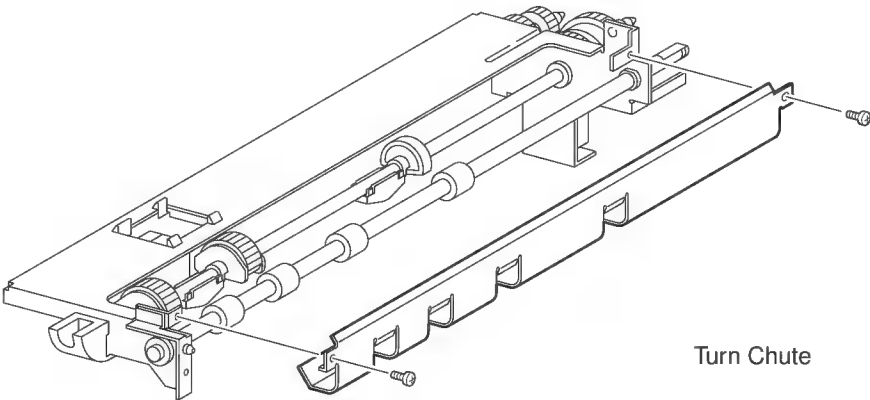


Figure 1

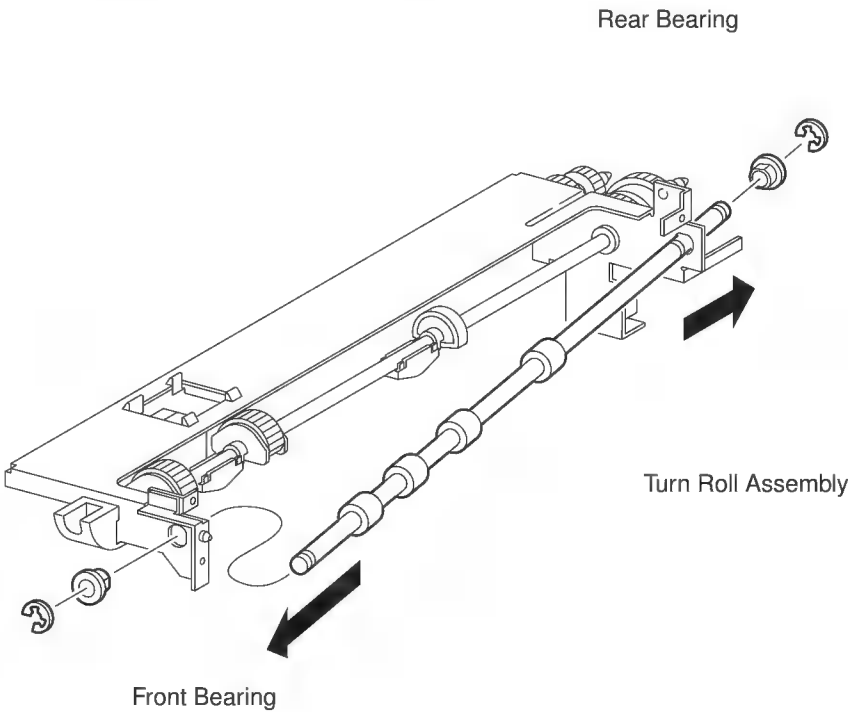


Figure 2

DRP 7.21 Turn Roll Assembly (PL22.2.24)

Use this procedure to remove and replace the Turn Roll Assembly for OPT1 Tray, OPT2 Tray, or OPT3 Tray of the LCIF.

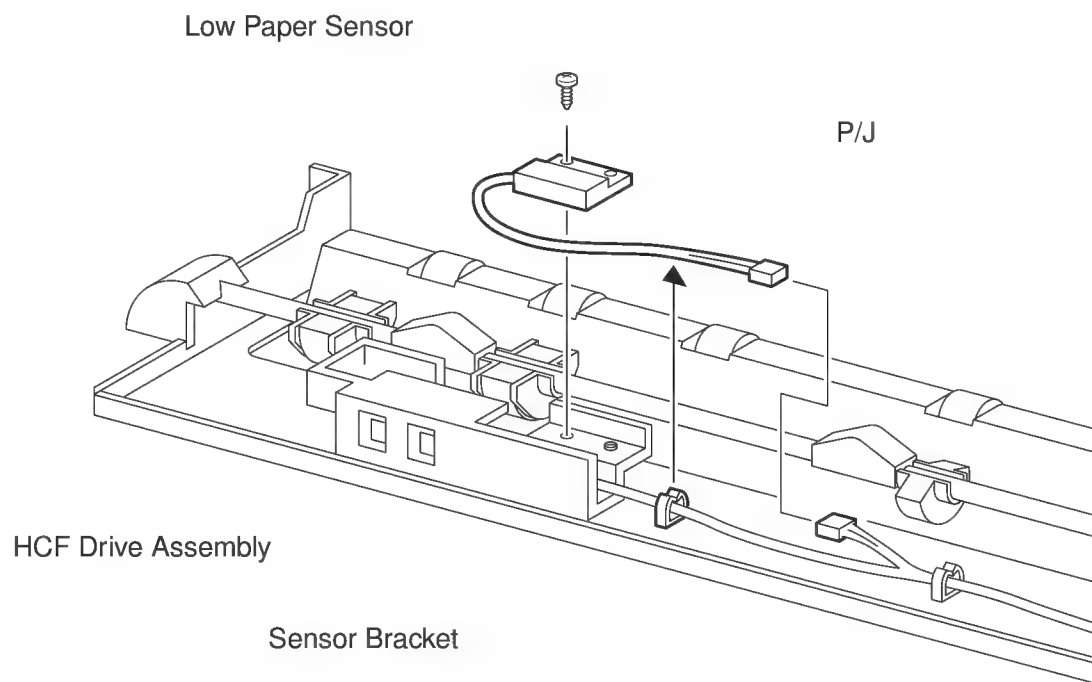
Removal

1. Remove the Turn Clutch (DRP 7.16).
2. Remove the LCIF Drive Assembly (DRP 7.15).
3. Place the LCIF Drive Assembly on a flat and stable work surface.
4. Remove the two screws securing the Turn Cover to the LCIF Drive Assembly and remove the Turn Cover (Figure 1).
5. Remove the E ring securing the rear of the Turn Roll shaft to the rear bearing (Figure 2).
6. Remove the E ring securing the front of the Turn Roll shaft to the front bearing.
7. Slide the Turn Roll Assembly shaft far enough to the rear so the front of the shaft clears the front bearing and remove the Turn Roll Assembly.

Replacement

1. Insert the rear of the Turn Roll Assembly shaft into the cutout in the rear of the LCIF Drive Assembly.
2. Insert the front of the Turn Roll Assembly shaft into the cutout in the front of the LCIF Drive Assembly.
3. Slide the front bearing, lip facing out, over the front end of the Turn Roll shaft and seat the bearing into the cutout in the LCIF Drive Assembly frame.
4. Slide the rear bearing, lip facing out, over the front end of the Turn Roll shaft and seat the bearing into the cutout in the LCIF Drive Assembly frame.
5. Use an E ring to secure the rear of the Turn Roll shaft to the rear bearing.
6. Use an E ring to secure the front of the Turn Roll shaft to the front bearing.
7. Reinstall the Turn Cover onto the LCIF Drive Assembly and use two screws to secure the Cover.
8. Reinstall the LCIF Drive Assembly (DRP 7.15).
9. Reinstall the Turn Clutch (DRP 7.16).

DRP 7.22 Low Paper Sensor (PL22.2.40)



DRP 7.22 Low Paper Sensor (PL22.2.40)

Use this procedure to remove and replace the Low Paper Sensor for OPT1 Tray, OPT2 Tray, or OPT3 Tray of the LCIF.

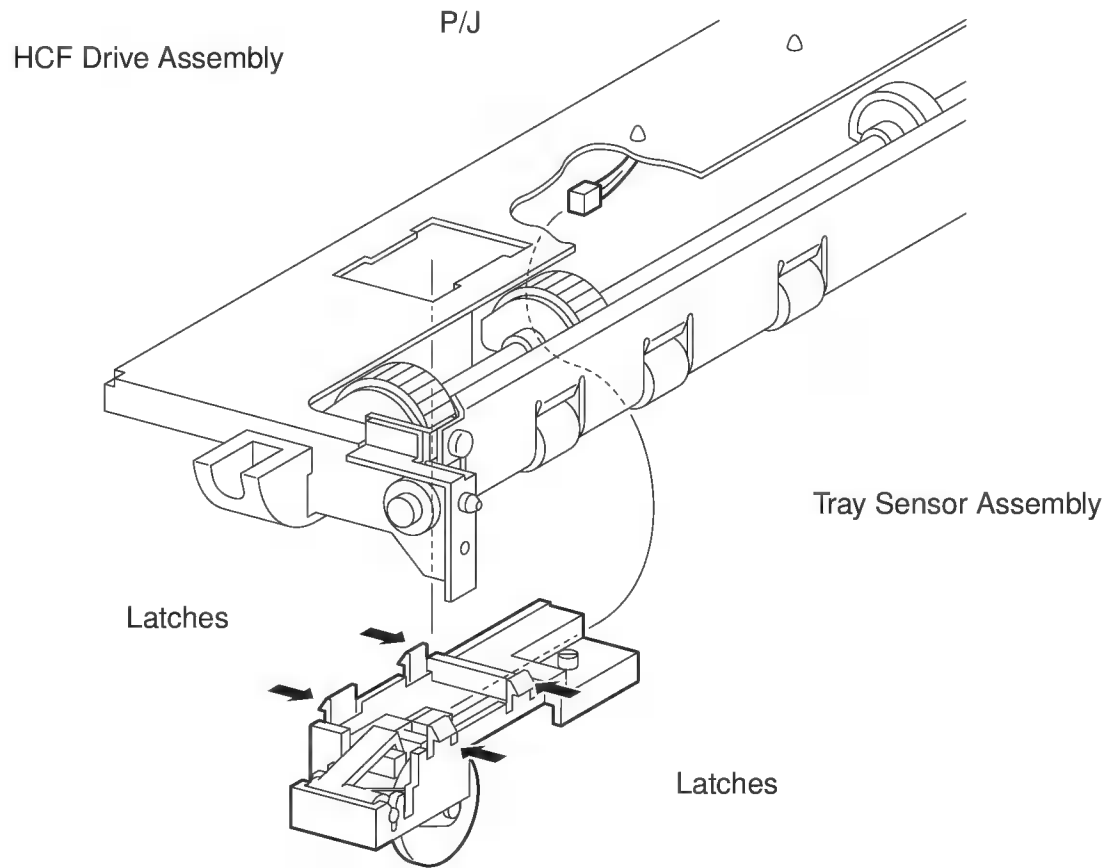
Removal

1. Remove the LCIF Drive Assembly (DRP 7.15).
2. Place the LCIF Drive Assembly on a flat and stable work surface.
3. Disconnect the P/J leading from the Low Paper Sensor.
4. Remove the screw securing the Low Paper Sensor to the Sensor Bracket and remove the Sensor.

Replacement

1. Reinstall the Low Paper Sensor onto the Sensor Bracket.
2. Line up the two holes in the Sensor with the screw hole and positioning tab on the Sensor Bracket.
3. Use one screw to secure the Low Paper Sensor to the Sensor Bracket.
4. Reconnect P/J leading from the Low Paper Sensor.
5. Reinstall the LCIF Drive Assembly (DRP 7.15).

DRP 7.23 Tray Sensor Assembly (PL22.2.29)



DRP 7.23 Tray Sensor Assembly (PL22.2.29)

Use this procedure to remove and replace the Tray Sensor Assembly for OPT1 Tray, OPT2 Tray, or OPT3 Tray of the LCF.

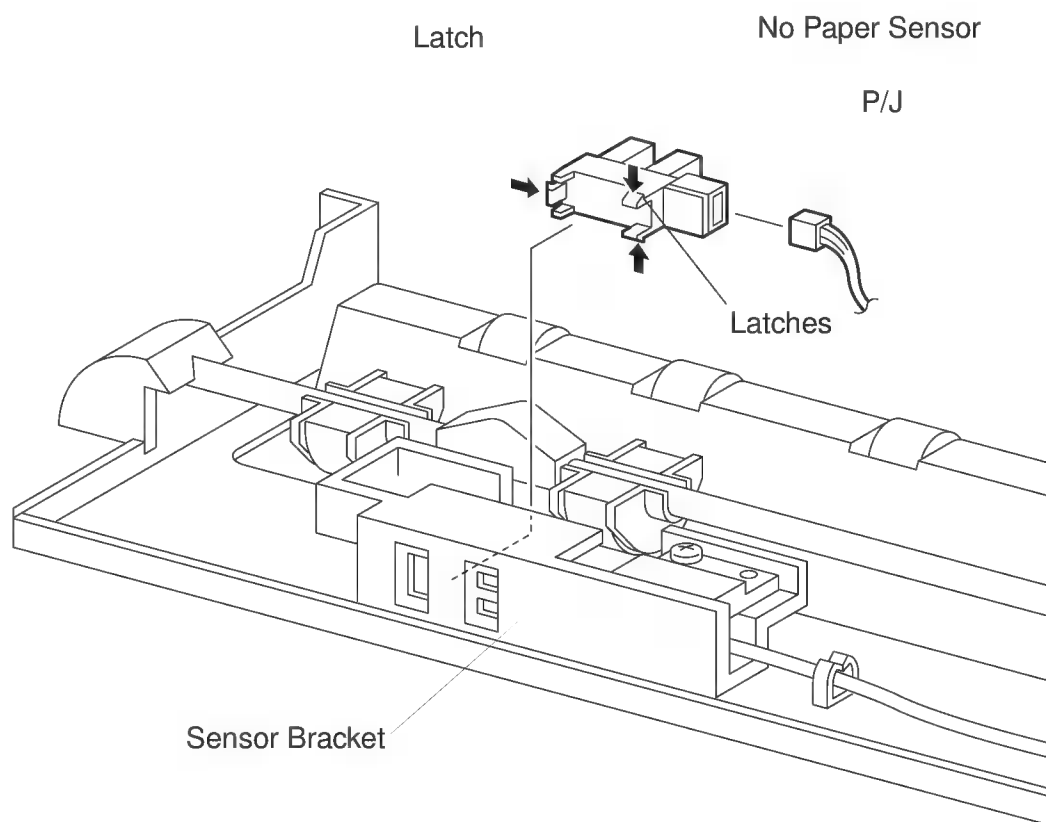
Removal

1. Remove the LCIF Drive Assembly (DRP 7.15).
2. Place the LCIF Drive Assembly on a flat and stable work surface.
3. Disconnect the P/J leading from the Tray Sensor Assembly.
4. Squeeze together the four latches securing the Tray Sensor Assembly to the LCIF Drive Assembly and remove the Tray Sensor Assembly.

Replacement

1. Position the Tray Sensor Assembly against the cutout in the LCIF Drive Assembly.
2. Push the Assembly into the cutout.
The latches snap into place.
3. Reconnect the P/J leading from the Tray Sensor Assembly.
4. Reinstall the LCIF Drive Assembly (DRP 7.15).

DRP 7.24 Tray No Paper Sensor (PL22.2.31)



DRP 7.24 Tray No Paper Sensor (PL22.2.31)

Use this procedure to remove the Tray No Paper Sensor for OPT1 Tray, OPT2 Tray, or OPT3 Tray of the LCIF.

Removal

1. Remove the LCIF Drive Assembly (DRP 7.15).
2. Place the LCIF Drive Assembly on a flat and stable work surface.
3. Disconnect the P/J from the No Paper Sensor.
4. Squeeze together the three latches securing the No Paper Sensor to the Sensor Bracket and remove the Sensor .

Replacement

1. Position the No Paper Sensor Assembly against the cutout in the Sensor Bracket.
2. Push the Sensor into the cutout.
The latches snap into place.
3. Reconnect the P/J to the No Paper Sensor.
4. Reinstall the LCIF Drive Assembly (DRP 7.15).

8.1 P/J Location Table	LCIF-98
8.2 P/J Location Map	LCIF-100

8.1 P/J Location Table

Use the table and map in this section to locate specific P/J connectors within the LCIF.

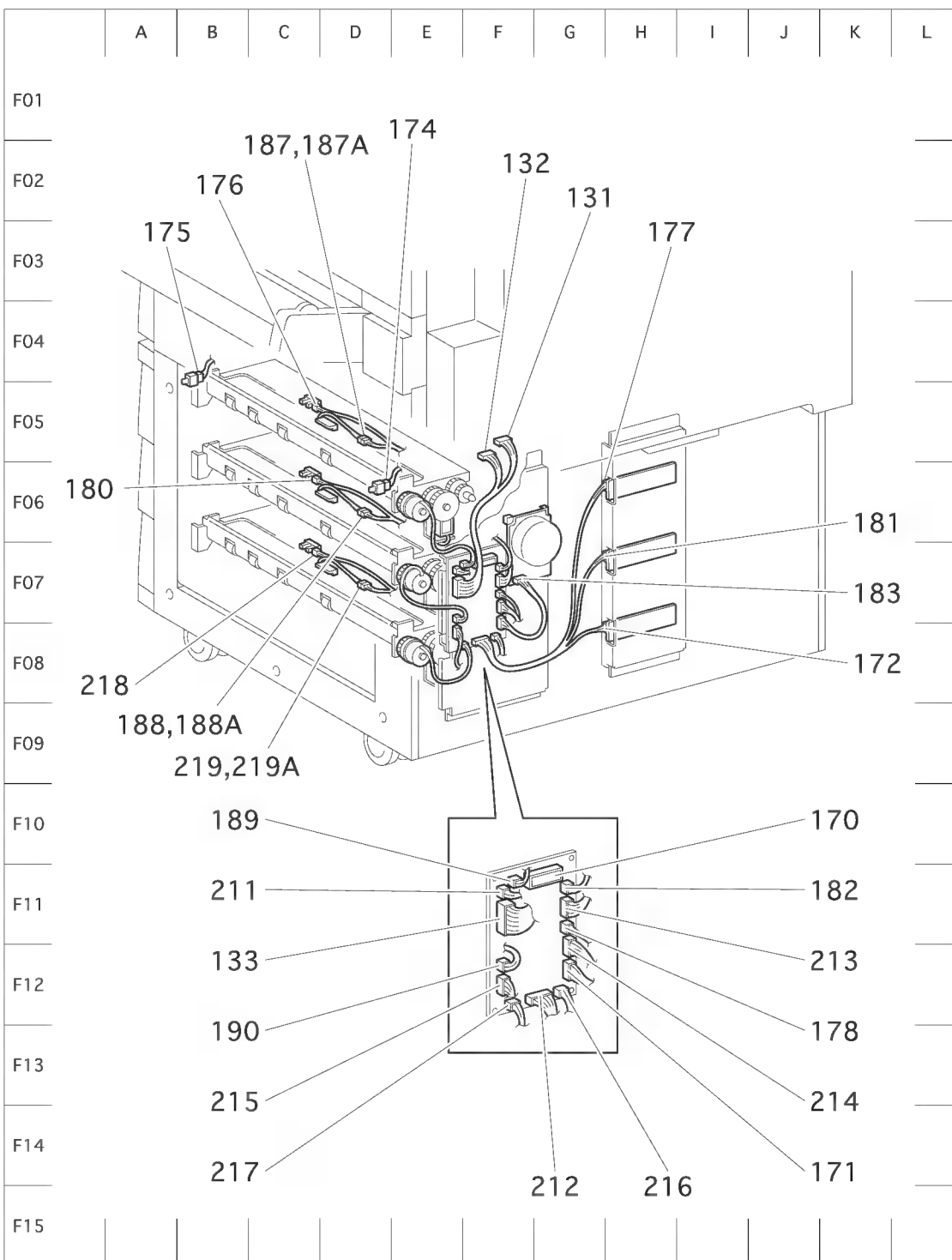
To find the location of a P/J:

1. Locate the P/J connector number in the first column of the table.
2. Locate the corresponding map and location number, such as M1-G/F11, in the second column.
3. Go to the map (M1) number and locate the coordinates (G/F11).

P/J	Map & Number	Connected to...	Other end connected to...
131	M1-F/F05	Feeder PWB P/J133	P/J131A
132	M1-F/F05	Feeder PWB P/J133	P/J132A
133	M1-F/F11	Feeder PWB	P/J131 & P/J132
170	M1-G/F10	Feeder PWB	Empty P/J. Not used.
171	M1-G/F12	Feeder PWB	Feeder Motor P/J18
172	M1-H/F08	OPT3 Tray Size Switch Assembly	Feeder PWB P/J212
174	M1-E/F06	Feeder Cover Switch	Feeder PWB P/J211 Feeder Cover Switch P/J175
175	M1-B/F05	Feeder Cover Switch	Feeder PWB P/J211 Feeder Cover Switch P/J174
176	M1-C/F05	OPT1 Tray Tray No Paper Sensor	Feeder PWB P/J213
177	M1-H/F06	OPT1 Tray Size Switch Assembly	Feeder PWB P/J212
178	M1-G/F11	Feeder PWB	OPT2 Tray Feed Solenoid 3T
180	M1-C/F06	OPT2 Tray Tray No Paper Sensor	Feeder PWB P/J214
181	M1-H/F07	OPT2 Tray Size Switch Assembly	Feeder PWB P/J212
182	M1-G/F11	Feeder PWB	OPT1 Tray Feed Solenoid 3T
183	M1-F/F07	Feeder Motor	Feeder PWB P/J171
187	M1-D/F05	OPT1 Tray Low Paper Sensor	P/J187A
187A	M1-D/F05	P/J187	Feeder PWB P/J213
188	M1-D/F06	OPT2 Tray Low Paper Sensor	P/J188A
188A	M1-D/F06	P/J188	Feeder PWB P/J214
189	M1-F/F11	Feeder PWB	OPT1 Tray Turn Clutch 3T

P/J	Map & Number	Connected to...	Other end connected to...
190	M1-F/F12	Feeder PWB	OPT2 Tray Turn Clutch 3T
211	M1-F/F11	Feeder PWB	Feeder Cover Switch P/J174 & P/J175
212	M1-G/F12	Feeder PWB	OPT1 Tray Size Switch Assembly P/J177 OPT2 Tray Size Switch Assembly P/J181 OPT3 Tray Size Switch Assembly P/J172
213	M1-G/F11	Feeder PWB	OPT1 Tray No Paper Sensor P/J176 P/J187A
214	M1-G/F12	Feeder PWB	Tray3 No Paper Sensor P/J180 P/J188A
215	M1-F/F12	Feeder PWB	OPT3 Tray No Paper Sensor P/J218
216	M1-G/F12	Feeder PWB	P/J219A
217	M1-F/F12	Feeder PWB	OPT3 Tray Turn Clutch 3T
218	M1-C/F07	Feeder PWB	OPT3 Tray No Paper Sensor
219	M1-D/F07	OPT3 Tray Low Paper Sensor	P/J 219A
219A	M1-D/F07	P/J 219	Feeder PWB P/J 21

8.2 P/J Location Map

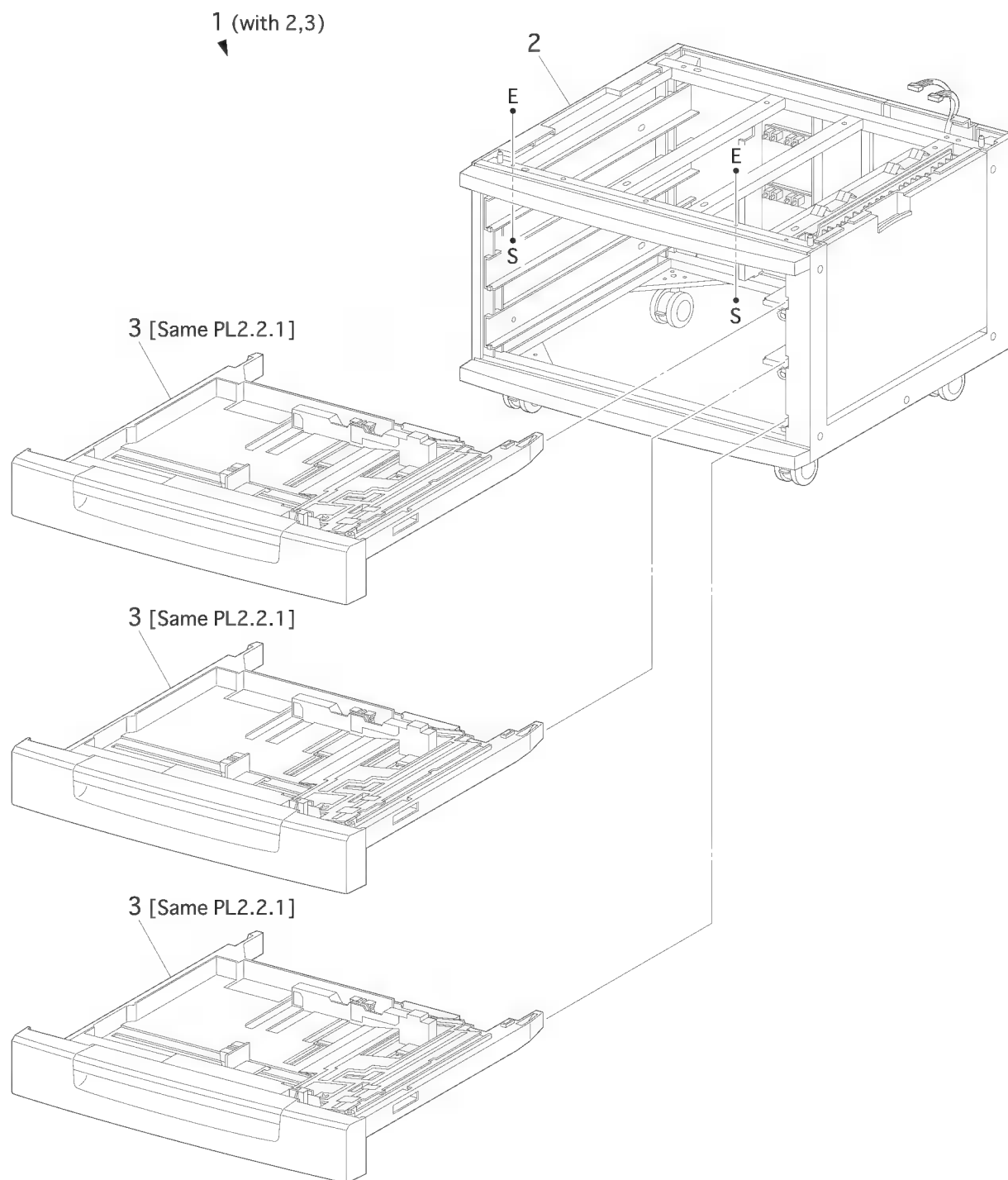


9.1 Using the Parts List	LCIF-103
9.2 Optional Feeder I (PL20.1)	LCIF-104
9.3 Optional Feeder II (PL21.1)	LCIF-106
9.4 Optional Feeder III (PL22.1)	LCIF-108
9.5 Optional Feeder IV (PL22.2)	LCIF-110

9.1 Using the Parts List

1. The numbers shown in each illustration correspond to the parts list number for that illustration.
2. Throughout this manual, parts are identified by the prefix “PL”, followed by a number, a decimal point, and another number. For example, PL3.12 means the part is item 12 of Parts List 3.
3. The capital letters “C”, “E”, “KL”, and “S” shown in an illustration stand for C-ring, E-ring, Clamp, and Screw, respectively.
4. A shaded triangle ▼ in an illustration indicates the item is part of an assembly.
5. The notation “**with X~Y**” following an part name indicates an assembly that is made up of components X through Y. For example, “1 (with 2~4)” means part 1 consists of part 2, part 3, and part 4.
6. The symbol \$ following a part name indicates the part is an FX Recommended Part and is constantly stocked and readily available. Other parts may be stocked according to the needs of each individual OEM client.
7. An asterisk * following a part name indicates the page contains a note about this part.
8. The notation “**J1<>J2 and P2**” is attached to a wire harness. It indicates that connector jack 1 is attached to one end of the wire harness and connector jack 2 is attached to the other end that is plugged into plug 2.

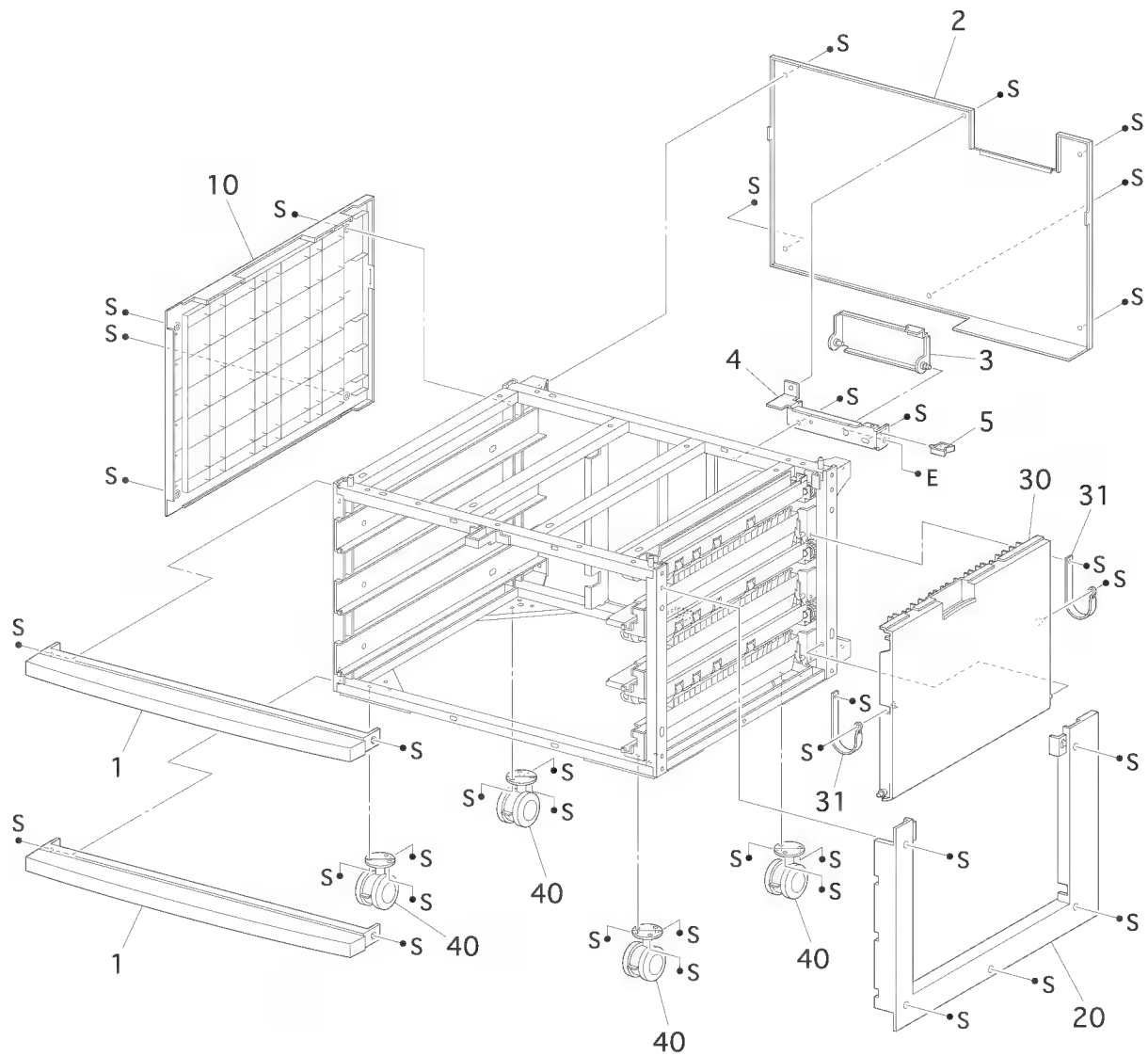
9.2 Optional Feeder I (PL20.1)



9.2 Optional Feeder I (PL20.1)

- 1. FEEDER UNIT (with 2 & 3)..... P/N 1710318-001
- 2. 3 TRAY FEEDER ASSEMBLY
- 3. UNIVERSAL TRAY (same as PL 2.1.1) P/N 1710317-001

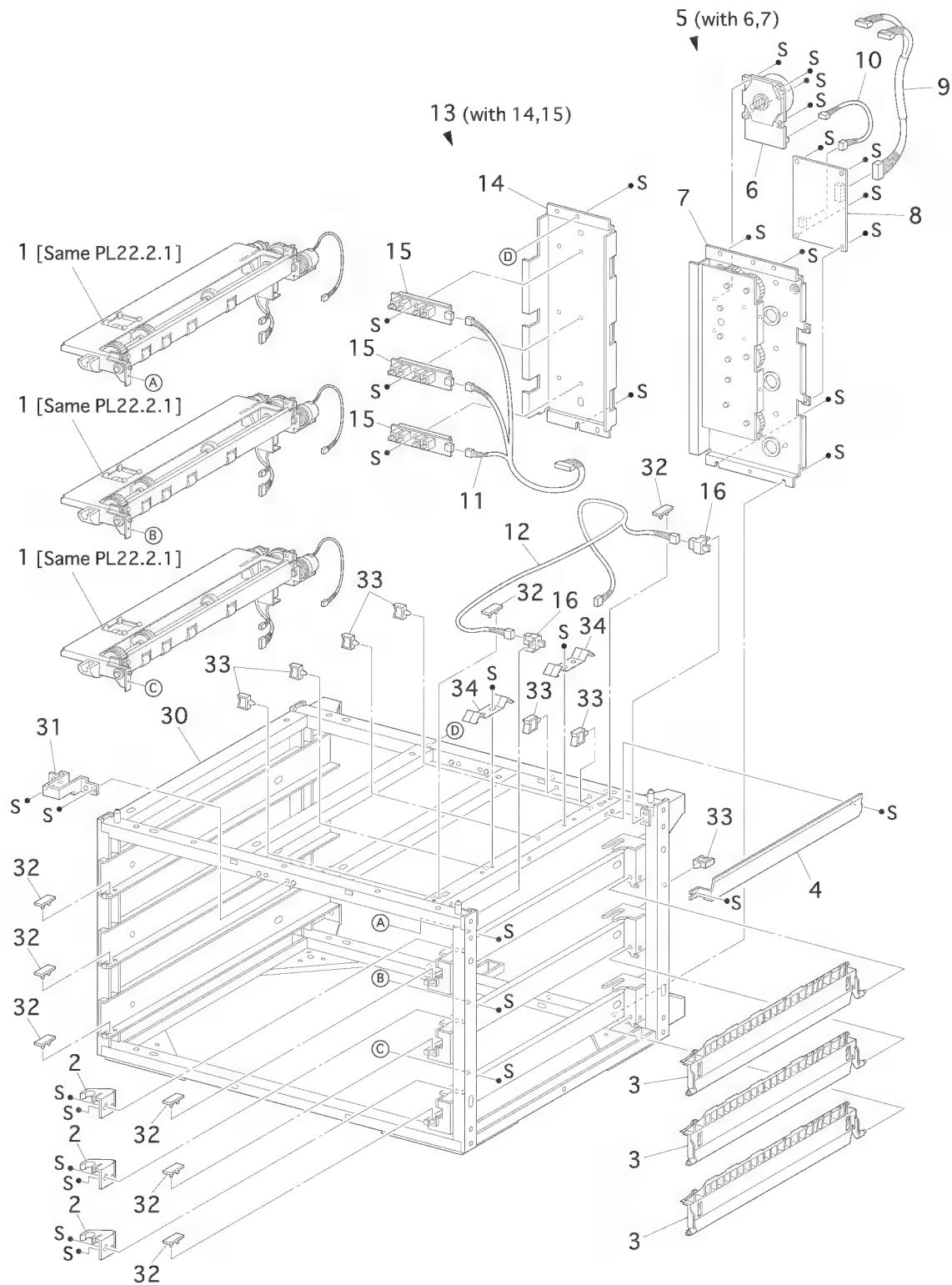
9.3 Optional Feeder II (PL21.1)



9.3 Optional Feeder II (PL21.1)

1. FEEDER FRONT COVER	P/N 865048D56451
2. FEEDER REAR COVER	P/N 865600K69680
3. FEEDER HARNESS COVER	P/N 865048K66030
4. COVER BRACKET	
5. FEEDER HARNESS CLAMP	
10. FEEDER LEFT COVER	P/N 865048E56440
20. FEEDER RIGHT COVER	P/N 865048E56460
30. FEEDER COVER ASSEMBLY	P/N 865054K11830
31. FEEDER COVER SUPPORT	P/N 865049E08041
40. DOUBLE CASTER	P/N 865017E93730

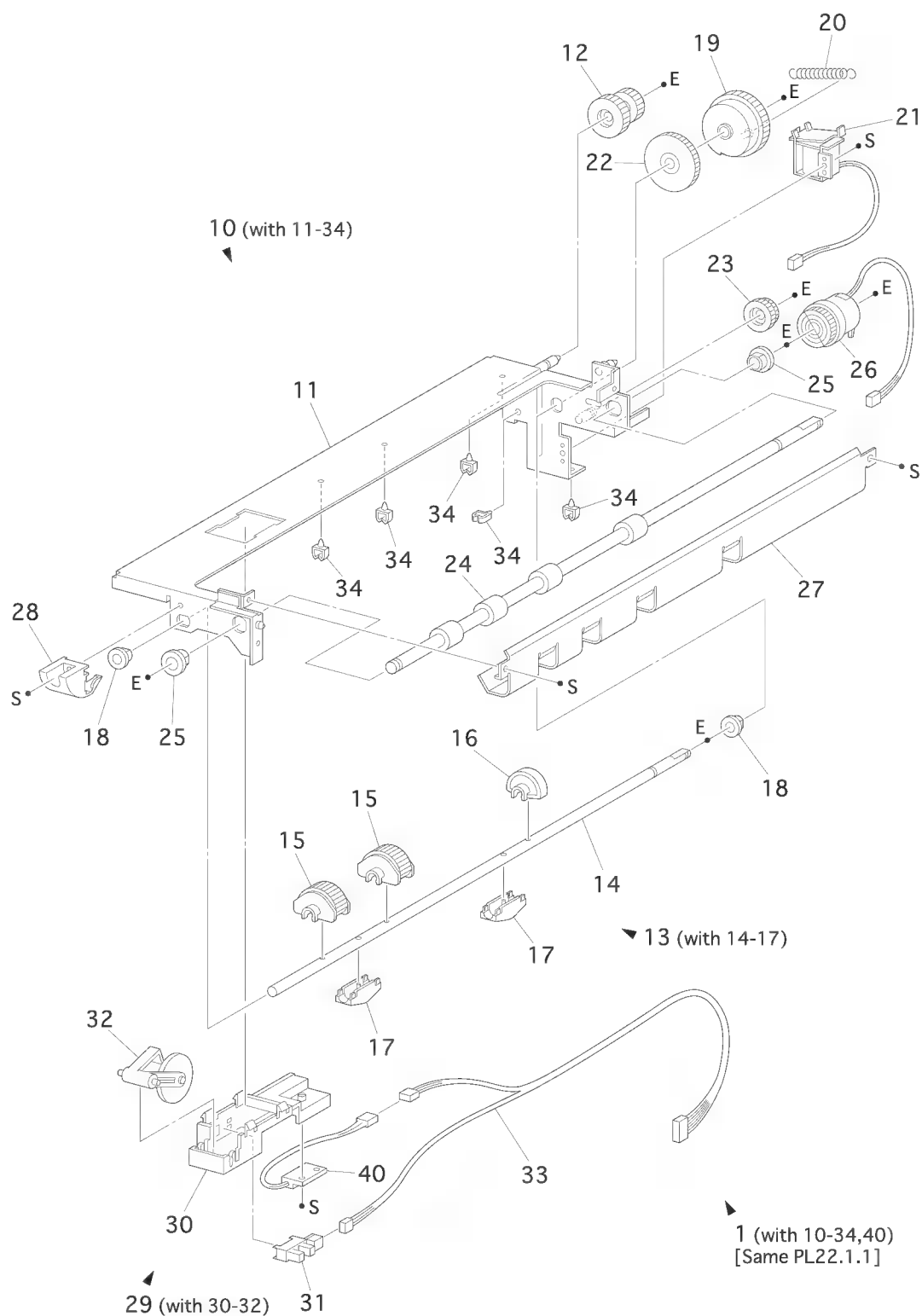
9.4 Optional Feeder III (PL22.1)



9.4 Optional Feeder III (PL22.1)

1. FEEDER HIGH ASSEMBLY (same as PL 22.2.1)	P/N 865007K83994
2. TRAY STOPPER 3T	
3. TURN IN COVER 3T	
4. FEEDER TOP COVER	
5. FEEDER MOTOR ASSEMBLY (with 6 and 7)	
6. FEEDER MOTOR	P/N 865127K23040
7. FEEDER GEAR ASSEMBLY.....	P/N 865600K69252
8. FEEDER PWB	P/N 865160K53840
9. FEEDER HARNESS	P/N 865162K18251
10. MOTOR HARNESS.....	P/N 865162K36740
11. SIZE HARNESS	P/N 865162K36720
12. SWITCH HARNESS	P/N 865162K36711
13. SIZE BRACKET ASSEMBLY 3T (with 14 and 15)	
14. SIZE BRACKET 3T	
15. SIZE SWITCH ASSEMBLY	
16. FEEDER COVER SWITCH	
30. 3 TRAY FEEDER FRAME	
31. FRONT COVER BRACKET	
32. SHEET CLAMP	
33. 3 TRAY FEEDER CLAMP	
34. FEEDER EME SPRIN	

9.5 Optional Feeder IV (PL22.2)



9.5 Optional Feeder IV (PL22.2)

- 1. FEEDER HIGH ASSEMBLY (with 10~34 and 40) (same as PL 22.2.1) P/N 865007K83994
- 10. FEEDER DRIVE ASSEMBLY (with 11~34)
- 11. FEEDER BRACKET
- 12. 3 TRAY IDLER GEAR-1
- 13. FEED ROLL ASSEMBLY 3T (with 14~17)
- 14. FEED SHAFT 3T
- 15. FEED ROLL 3T
- 16. FEED CORE ROLL 3T
- 17. FEED ROLL GUIDE 3T
- 18. FEED BEARING 3T
- 19. FEED GEAR 3T
- 20. FEED SPRING 3T
- 21. FEED SOLENOID 3T
- 22. 3 TRAY IDLER GEAR 2
- 23. 3 TRAY IDLER GEAR 3
- 24. TURN ROLL ASSEMBLY 3T
- 25. TURN BEARING 3T
- 26. TURN CLUTCH 3T
- 27. TURN COVER 3T
- 28. FEED SHAFT GUIDE 3T
- 29. TRAY SENSOR ASSEMBLY 3T (with 30~32)
- 30. TRAY N/P BRACKET 3
- 31. TRAY NO PAPER SENSOR
- 32. TRAY N/P ACTUATOR
- 33. TRAY HARNESS 3T
- 34. FEEDER DRIVE CLAMP
- 40. LOW PAPER SENSOR

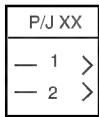
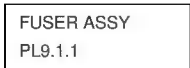
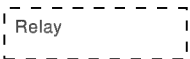
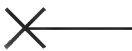
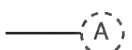
10.1 Using Wiring Diagrams	LCIF-114
10.2 Wiring Diagram Notations	LCIF-115
10.3 LCIF Master Wiring Diagram	LCIF-116
10.4 BD1 MCU PWB’LVPS’Feeder PWB	LCIF-117
10.5 BD2 Feeder PWB’Feeder Cover Switch’Size Switches’Feeder Motor	LCIF-118
10.6 BD3 Feeder PWB’No Paper Sensors’Low Paper Sensors	LCIF-120
10.7 BD4 Feeder PWB’Feed Solenoids’Turn Clutches	LCIF-122

10.1 Using Wiring Diagrams

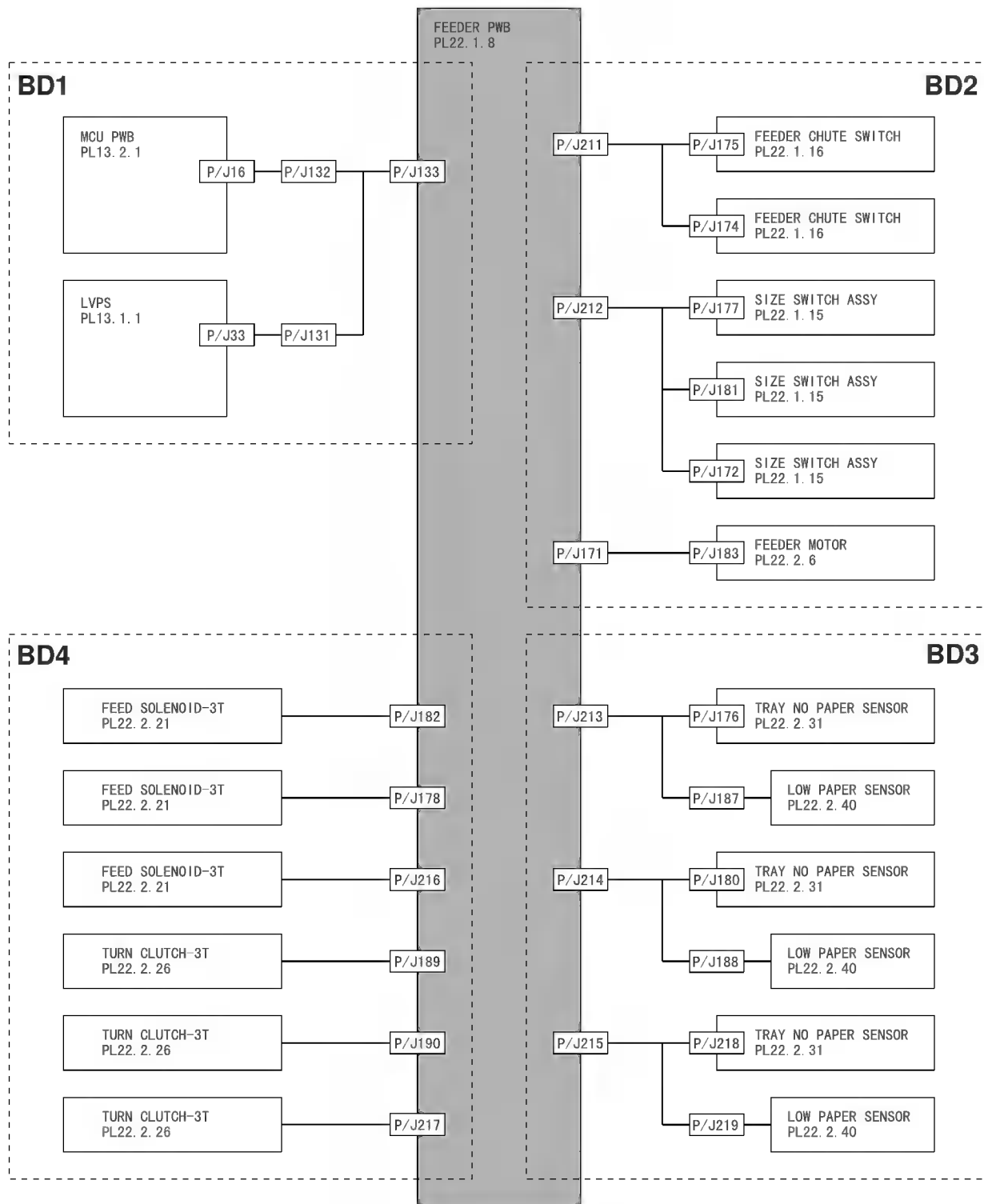
This section of the manual contains individual block diagrams (BD) to better illustrate the electrical relationships between components and assemblies within the Large Capacity Input Feeder. Each wire in the diagrams is tagged with a signal name, and each wire is terminated at both ends with a pin number.

10.2 Wiring Diagram Notations

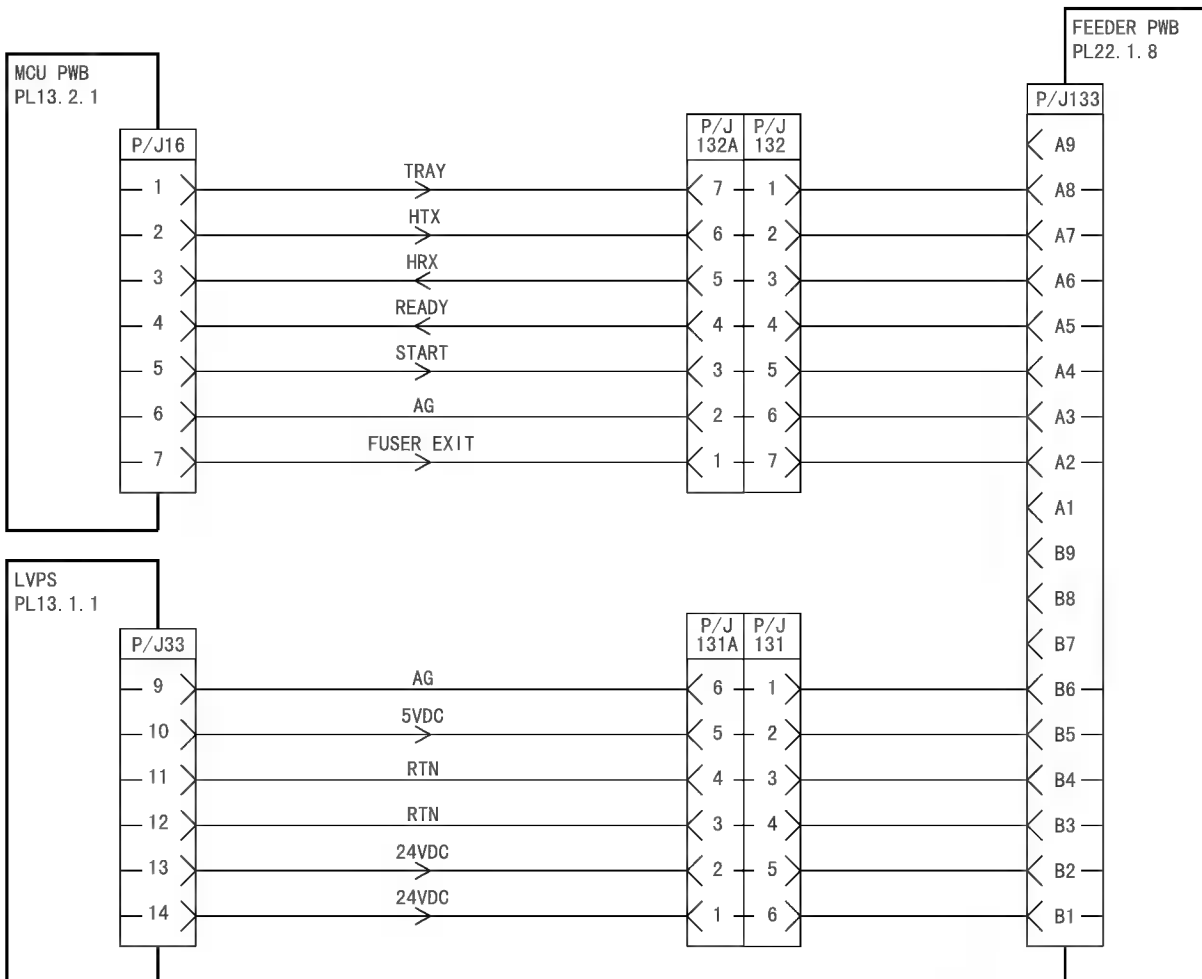
The wiring diagrams presented in this manual use the following circuit notations to describe components and signal paths within the LCIF.

	Plug/Jack XX — is a male connector (plug) of P/J xx > is a female connector (jack) of P/J xx
	Component name Section 14 Parts List location number
	Component or sub-assembly within a larger assembly
	Wire connection
	Frame ground wire fastened with a screw to the printer frame
	Diagram simplification; wire continues at another point within the same Block Diagram.
	Diagram simplification; wire continues at another point within a different Block Diagram.
	Wire with signal name and direction of signal flow. In some cases, such as a signal name of 5VDC, the signal is a steady flow of approximately 5VDC. In other cases, such as a signal name HEATER ON (L) 5VDC, the signal is near 5VDC when off and near 0VDC when on. Or in the case of the signal name HEATER ON (H) 5VDC, the signal is near 5VDC when on and near 0VDC when off.
	Metallic contact, such as a spring, with direction of signal flow.
FG or 	Frame ground
SG or 	Signal ground
AG	Analog ground
RTN	Signal return
	Diagram simplification; connector is continued on the indicated Block Diagrams

10.3 LCIF Master Wiring Diagram



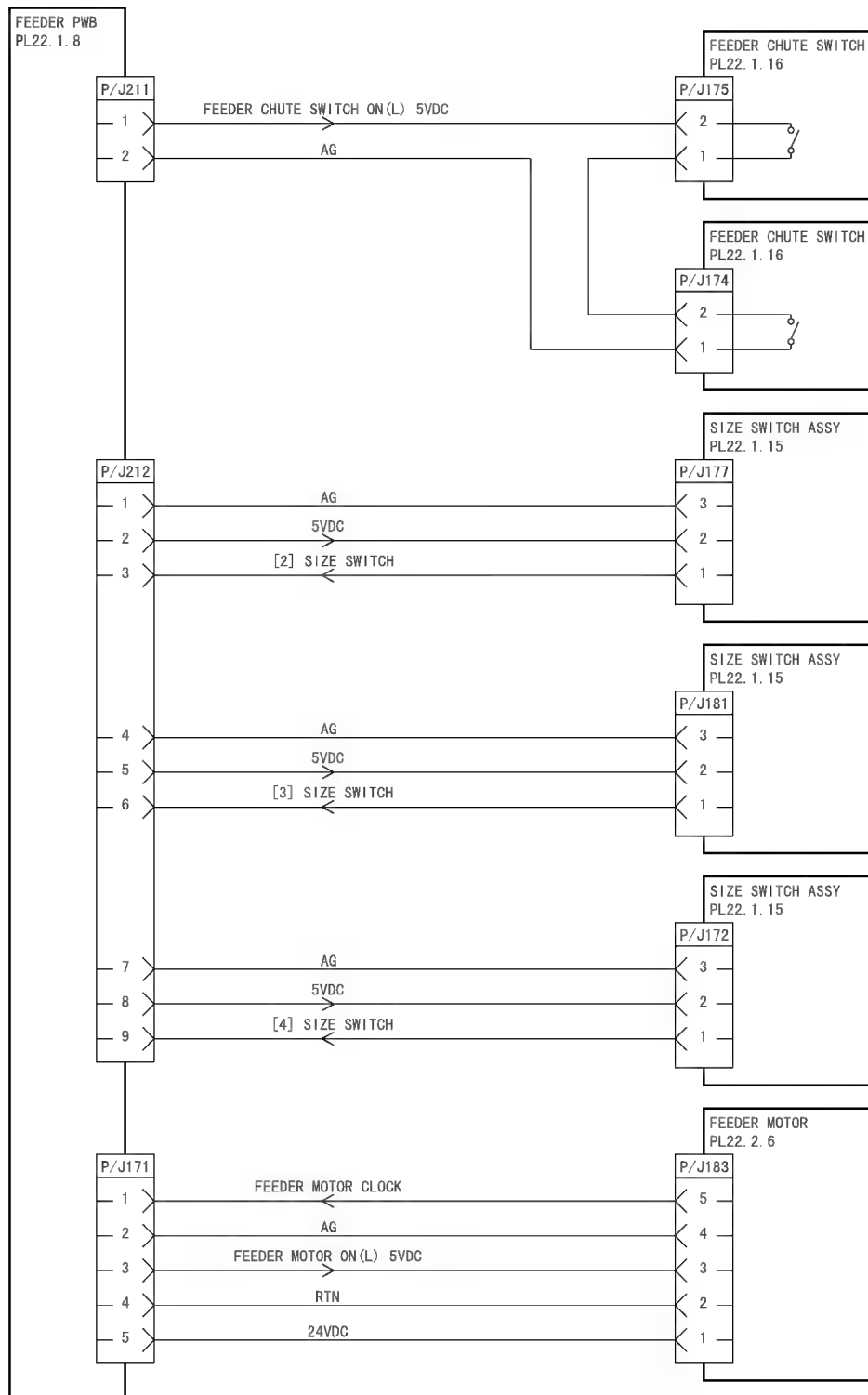
10.4 BD1 MCU PWB↔LVPS↔Feeder PWB



The following table shows the signal names for the MCUPWB - Low Voltage Power Supply to the Feeder PWB:

Signal Name	Description
TRAY	Signal to the Feeder PWB to select feed and operation from a specific LCIF tray
HTX	Command signal from the MCU PWB to the Feeder PWB
HRX	Status signal from the Feeder PWB to the MCU PWB
READY	Status signal from the Feeder PWB to the MCU PWB
START	Command signal from the MCU PWB to the Feeder PWB
FUSER EXIT	Fuser Exit status signal from the MCU PWB to the Feeder PWB

10.5 BD2 Feeder PWB↔Feeder Cover Switch↔Size Switches↔Feeder Motor

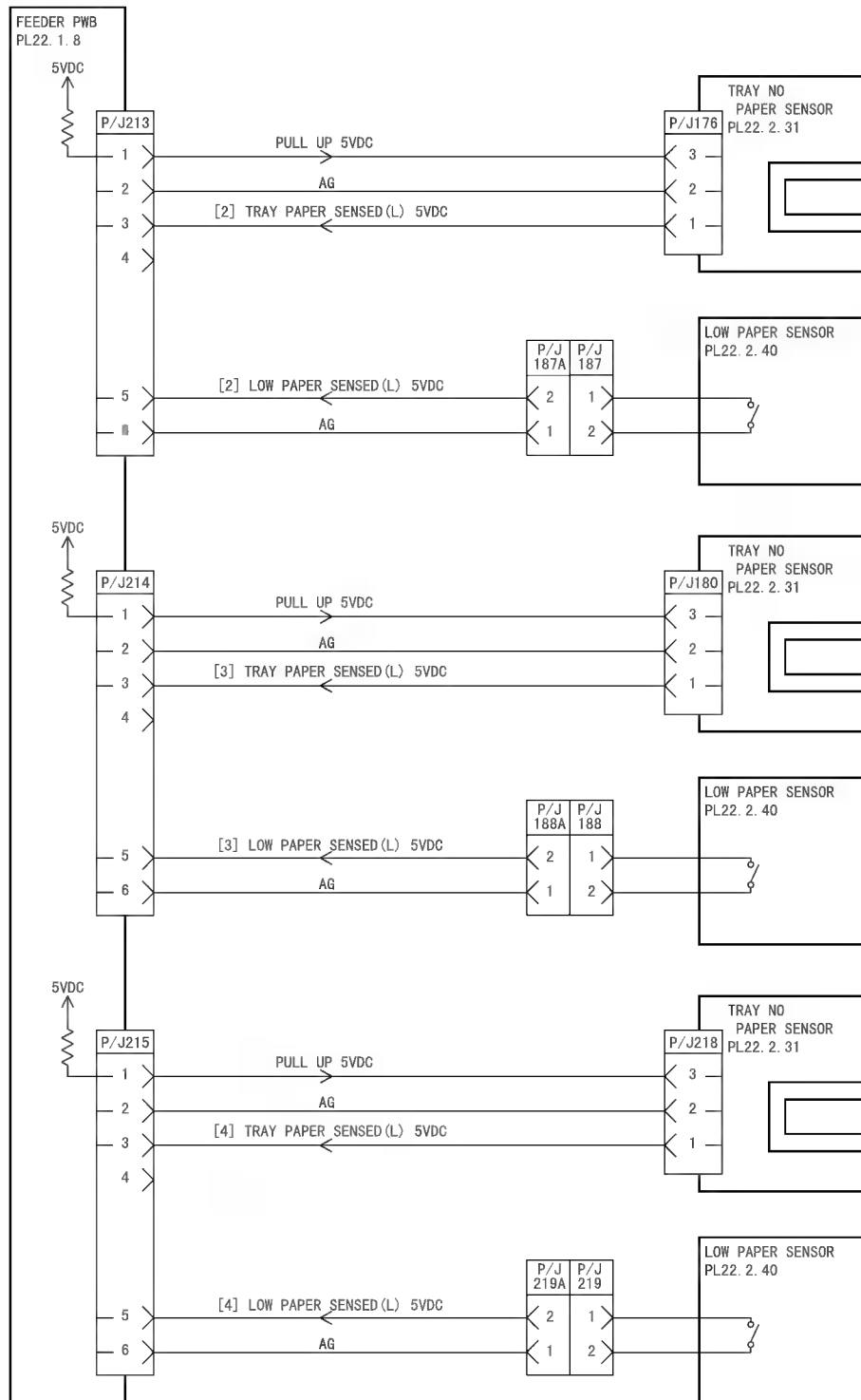


BD2 Feeder PWB↔Feeder Cover Switch↔Size Switches↔Feeder Motor

The following table shows the signal names for the LCIF Components to the Feeder PWB:

Signal Name	Description
FEEDER COVER SWITCH ON (L) 5VDC	Monitors the state of the two series wired Feeder Cover Switches. Low=Actuated. High=Not actuated
[2] SIZE SWITCH	Analog signal from the OPT1 Tray Size Sensor
[3] SIZE SWITCH	Analog signal from the OPT2 Tray Size Sensor
[4] SIZE SWITCH	Analog signal from the OPT3 Tray Size Sensor
FEEDER MOTOR CLOCK	Clock signal for the Feeder Motor
FEEDER MOTOR ON (L) 5VDC	Switches the Feeder Motor. Low=On. High=Off

10.6 BD3 Feeder PWB↔No Paper Sensors↔Low Paper Sensors

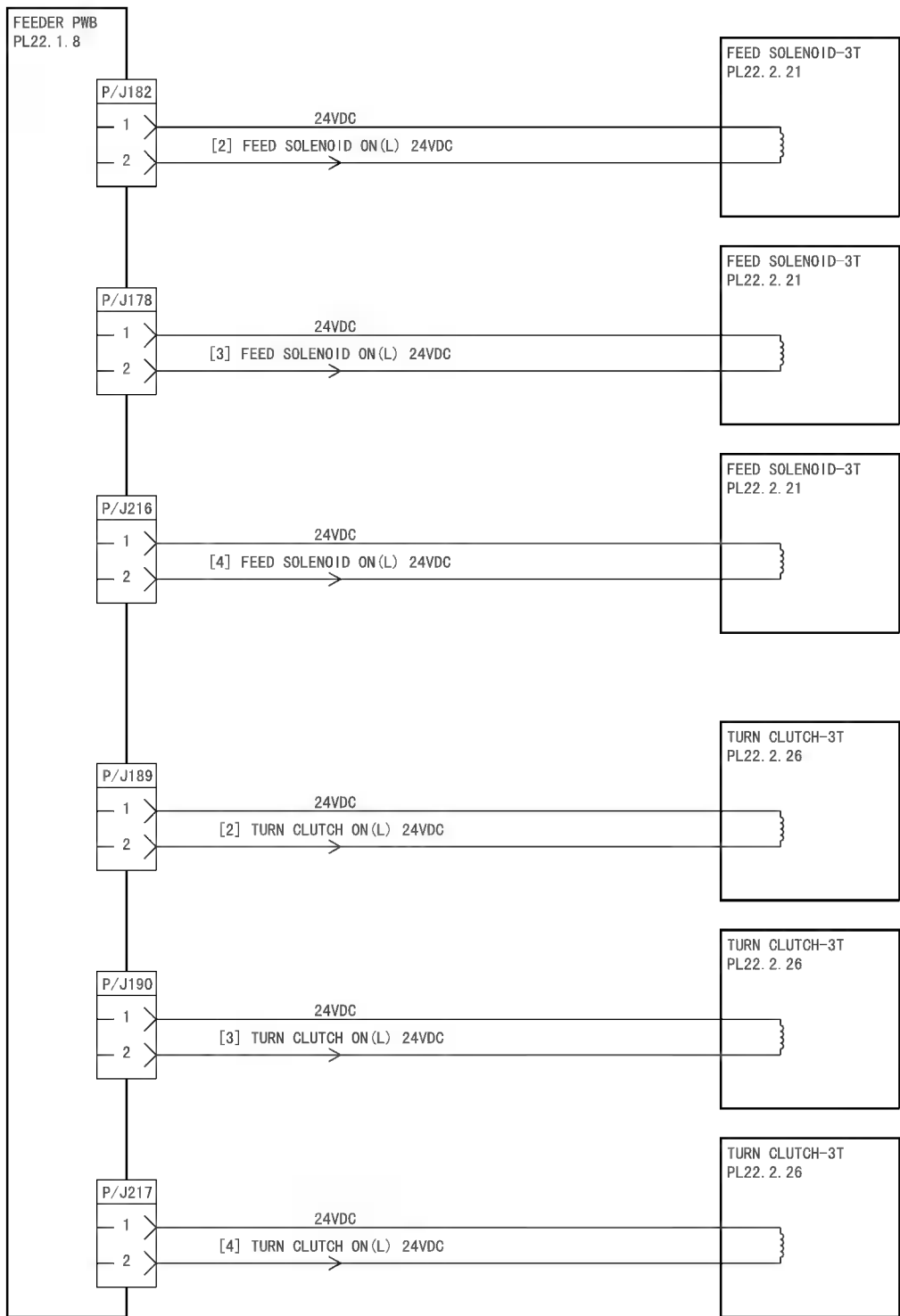


BD3 Feeder PWB↔No Paper Sensors↔Low Paper Sensors

The following table shows the signal names for the LCIF Components to the Feeder PWB:

Signal Name	Description
[2] TRAY PAPER SENSED (L) 5VDC	Monitors paper level in OPT1 Tray. Low=Paper present. High=Paper not present
[2] LOW PAPER SENSED (L) 5VDC	Signal from the OPT1 Tray Low Paper Sensor. Low=Low paper level. High=Normal paper level
[3] TRAY PAPER SENSED (L) 5VDC	Monitors paper level in OPT2 Tray. Low=Paper present. High=Paper not present
[3] LOW PAPER SENSED (L) 5VDC	Signal from the OPT2 Tray Low Paper Sensor. Low=Low paper level. High=Normal paper level
[4] TRAY PAPER SENSED (L) 5VDC	Monitors paper level in OPT3 Tray. Low=Paper present. High=Paper not present
[4] LOW PAPER SENSED (L) 5VDC	Signal from the OPT3 Tray Low Paper Sensor. Low=Low paper level. High=Normal paper level

10.7 BD4 Feeder PWB↔Feed Solenoids↔Turn Clutches



BD4 Feeder PWB↔Feed Solenoids↔Turn Clutches

The following table shows the signal names for the LCIF Components to the Feeder PWB:

Signal Name	Description
[2] FEED SOLENOID ON (L) 24VD	Switches the OPT1 Tray Feed Solenoid. Low=Feed. High=No feed
[3] FEED SOLENOID ON (L) 24VD	Switches the OPT2 Tray Feed Solenoid. Low=Feed. High=No feed
[4] FEED SOLENOID ON (L) 24VD	Switches the OPT3 Tray Feed Solenoid. Low=Feed. High=No feed
[2] TURN CLUTCH ON (L) 24VDC	Switches the OPT1 Tray Turn Clutch. Low=Feed. High=No feed
[3] TURN CLUTCH ON (L) 24VDC	Switches the OPT2 Tray Turn Clutch. Low=Feed. High=No feed
[4] TURN CLUTCH ON (L) 24VDC	Switches the OPT3 Tray Turn Clutch. Low=Feed. High=No feed

11.1 General Specifications.	LCIF-127
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11.1 General Specifications

Category	Specification
Configuration	Customer installed option. Attaches under the base printer. The basic Large Capacity Input Feeder (LCIF) has three trays; OPT1 Tray (upper tray) and OPT2 Tray (middle tray) and OPT3 Tray (lower tray)
Paper feed	Each paper tray in the LCIF feeds 250 sheets of Standard Paper
Power requirements	The base engine provides all of the LCIF power requirements; +5VDC and +24VDC
Size and weight	Height: 426mm $\pm$ 1% Width: 560mm $\pm$ 1% Depth: 562mm $\pm$ 1% Weight: 23.5kg $\pm$ 1%

